

## Possible References

22/3,K/3 (Item 3 from file: 350)  
DIALOG(R)File 350: Derwent WPIX  
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**Blu-ray disk-read only memory for use with player, records copy protection-related information and copy protection -related information recording/ non-recording identification information, as wobbled pre-pit type**

Patent Assignee: KIM J Y (KIMJ-I); LG ELECTRONICS INC (GLDS); SUH S W (SUHS-I)

Inventor: KIM J; KIM J Y; SEO S U; SUH S; SUH S W

Patent Family ( 9 patents, 108 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2004075193	A1	20040902	WO 2004KR338	A	20040219	200461	B
US 20040223427	A1	20041111	US 2003447706	P	20030219	200475	E
			US 2004780756	A	20040219		
KR 2004074583	A	20040825	KR 200373800	A	20031022	200501	E
EP 1597730	A1	20051123	EP 2004712781	A	20040219	200577	E
			WO 2004KR338	A	20040219		
TW 200423050	A	20041101	TW 2004104152	A	20040219	200612	E
CN 1764969	A	20060426	CN 200480007952	A	20040219	200654	E
JP 2006518529	W	20060810	WO 2004KR338	A	20040219	200654	E
			JP 2006502712	A	20040219		
US 7574003	B2	20090811	US 2004780756	A	20040219	200953	NCE
CN 1764969	B	20101124	CN 200480007952	A	20040219	201108	E

### Abstract:

NOVELTY - The **blu-ray** disk-read only memory (BD-ROM) has a permanent information and control data (PIC) **zone** in which copy **protection**-related information (CPI) and identification information (CPI f lag) indicating recording/non-recording of the copy **protection**-related information are recorded as a wobbled pre-pit type.... **blu-ray** disk-read only memory forming apparatus; **blu-ray** disk-read only memory reproducing apparatus; and **blu-ray** disk-read only memory reproduction method... ..  
USE - **Blu-ray** disk-read only memory (BD-ROM) for use with recorder, player... .. ADVANTAGE - **Protects blu-ray** disk-read only memory from illegal copy effectively, and performs easy distinction between legal and illegal **blu-ray** disk-read only memory... .. Disclosed herein are a **recording medium**, an apparatus for forming the **recording medium**, and an apparatus and method for reproducing the **recording medium**. CPI (Copy Protection-related Information), identification information (CPI)... .. **BD-ROM** formatter includes a copy protection control chip (CPCC). Inputted to the CPCC of the **BD-ROM** formatter is a contents **authoring code** file provided by the contents provider, which contains **control data**, such as CPI and a CPI flag, and main data such as an A/V stream. The **BD-ROM** formatter separates the control data and main data from the inputted contents **authoring code** file through the CPCC and formats the separated control data and main data such that they are suitable to a **BD-ROM** standard. Thereafter, the mastering machine makes a mass-copyable **master** using the output of the **BD-ROM** formatter inputted thereto... .. For legal disc making, a legal contents **authoring code** file containing control data, such as legal CPI and a legal CPI **flag**, and **main data** is applied to the **BD-ROM** formatter. For example, here a **disc** to be legally made is of a copy protected mode type, legal contents **authoring code** file containing CPI and 'CPI\_Flag=1' is inputted to the **BD-ROM** formatter. Alternatively, where a **disc** to be legally made is of a copy free mode type, a legal contents **authoring code** file containing no CPI and only 'CPI\_Flag=0' is inputted to the **BD-ROM** formatter. The **BD-ROM** formatter formats the legal **control data** and **main data** separated through the CPCC such that they are suitable to the **BD-ROM** standard, and the mastering machine makes a master. However, in the case where the illegal **disc**

copying is attempted, only a **data stream**, or **main data**, illegally stored in the storage medium is inputted to the **BD-ROM** formatter, or an illegal contents **authoring code** file containing the main **data** and illegal **control data** is inputted to the **BD-ROM** formatter. In this case, the **BD-ROM** formatter formats wrong **control data** containing a **CPI** flag fixed at 'CPI\_Flag=1' and wrong **CPI** or no **CPI**, and the **main data**.... ..the **optical disc**, and compulsorily stops a data playback operation upon judging that the disc has been illegally copied. Therefore, it is possible to effectively **protect** an **optical disc** from illegal copying, make an accurate and easy distinction between a legally made **optical disc** and an illegally made **optical disc**, and... ..

**Claims:**

1. A **recording medium**, comprising: a specific **area** in which copy **protection**-related information and identification information indicative of recording or non-recording of the copy **protection**-related information are recorded as a wobbled pre-pit type.... .. The invention claimed is: 1. A computer readable **recording medium** for use in an apparatus for reproducing data stored in the computer readable **recording medium**, comprising: a specific **area** in which copy **protection**-related information and identification information indicative of recording or non-recording of the copy **protection**-related information are recorded as a wobbled pre-pit type, the copy **protection**-related information and the identification information causing the apparatus to determine whether or not the data is copied on the computer readable **recording medium** through a legal process.

**Files protection method e.g. for optical writable disk - having storage layer which is capable of being disrupted when laser beam of sufficient intensity is focused with disk having transparent substrate layer on one side of storage layer and lacquer layer on other side**

Patent Assignee: EASTMAN KODAK CO (EAST)

Inventor: BROWNSTEIN S A; CUSHMAN T R; KLINE P J; LENTZ J P

Patent Family ( 1 patents, 1 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 5706266	A	19980106	US 1991810976	A	19911220	199808	B
			US 1992999626	A	19921231		
			US 1995432445	A	19950501		

#### Abstract:

The method involves physically embedding an identification signal group in a writable optical disk. A second identification signal group is stored in a file written on the writable optical disk. On initiation of interaction between an interaction system and the writable optical disk, a representation of the two identification signal groups is transferred to a signal processing unit of the interaction system. The two identification signals group representation in the signal processing unit and continuing interaction are compared between the interaction system and the writable optical disk only when the comparison between the two identification signal group representations is positive... A transferred file is decoded prior to processing by the processing unit. Where the interaction system has a third identification signal group associated with it, the method involves transferring a representation of the third identification signal group to the signal processing unit of the interaction system. The third and first identification signal group representations are compared in the signal processing unit. Continuing interaction between the interaction system and the writable optical disk only when the comparison between the first and third identification signal group representations is positive... disruptions provided by the laser beam are selected to provide human readable and/or machine readable patterns. To reduce the damage to portions of the optical disk other than the storage layer, the storage layer is exposed to the laser beam prior to curing, or prior to applying and curing the lacquer layer. The optical disk can be of the type with data written thereon during fabrication, or the disk can be of the type in which data can be impressed thereon after fabrication of the optical disk. The patterns on the optical disk can be in the form of optical bar codes. In one application of the present invention involving the type of disk on which data can be written after fabrication...

#### Claims:

A method of protecting files stored on an optical writable disk, said method comprising the steps of: physically embedding a first identification signal group in a writable optical disk; storing a second identification signal group in a file written on said writable optical disk; on initiation of interaction between an interaction system and said writable optical disk, transferring a representation of said first and said second identification signal group to a signal processing unit of said interaction system; comparing said first and said second identification signal group representation in said signal processing... wherein said interaction system has a third identification signal group associated therewith, said method further comprising the steps of transferring a representation of said third identification signal group to the signal processing unit of said interaction system and comparing said third and first identification signal group representations in said signal processing unit and continuing interaction between said interaction system and said writable optical disk only when said comparison between said first and third identification signal group representations is positive. Basic Derwent Week: 199808

17/3,K/3 (Item 3 from file: 350)  
 DIALOG(R) File 350: Derwent WP1X  
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**Cryptographic system for secure key distribution and management for DVD copy protection**  
 Patent Assignee: INTEL CORP (ITLC)  
 Inventor: AUCSMITH D W

Patent Family ( 1 patents, 1 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 5915018	A	19990622	US 1996740976	A	19961105	199936	B

#### Abstract:

NOVELTY - A portion of a digital video disc (DVD) is encoded with digital content **encrypted** under a content **key** which is **encrypted** under a public **key** and written out of band on **another portion** of the **disc**. An information handling system (206) is accessed by the player who receives the disc. ...  
 USE - For secure **key** distribution and management for DVD copy protection.... ADVANTAGE - The received compressed and **encrypted data** is decompressed and decrypted without exposing decrypted data or the cryptographic **keys**, as a result of which the DVD **copy** protection is not compromised....  
 DESCRIPTION OF DRAWINGS - The figure shows the block diagram of **cryptographic** system where access to the DVD content is secure... A cryptographic system and method for secure distribution and management of cryptographic **keys** for use in a DVD copy protection scheme is disclosed. A DVD disc having compressed, **encrypted content** written on a **first portion** of the disc, and the content encryption **key**, itself **encrypted** with a **second key** and written **out of band on a second portion** of the **disc** is used to provide **content, key**, and control information to a DVD drive according to the **present invention**. The DVD drive is coupled to a decompressor and a video controller. The video controller and DVD drive engage in a handshaking protocol in which all of the communication between them is **encrypted**. After verifying that the video controller is registered and not known to be compromised, the DVD drive passes the **content key** and control information to the video controller, and the compressed, **encrypted content** to the decompressor. The content decompressed by the decompressor is communicated to the video controller where it... ..

#### Claims:

secure distribution of digital content, comprising: a) a machine readable medium, a **first portion** of which is **encoded** with digital content **encrypted** under a content **key**, and a **second portion** of which is **encoded** out of band with a content **key** encrypted under a **public key**; b) a player **operable** to receive the machine readable medium and read the contents thereof; c) an information handling system coupled to the player; and d) a video controller... Basic Derwent Week: 199936

17/3,K/4 (Item 4 from file: 350)  
 DIALOG(R)File 350: Derwent WPIX  
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**Information recording medium e.g. CD-ROM etc. - has key information recorded in lead-in region, and used for descrambling of data stored in data recording region**

Patent Assignee: MATSUSHITA DENKI SANGYO KK (MATU); MATSUSHITA ELECTRIC IND CO LTD (MATU)

Inventor: FUKUSHIMA Y; ITO M; ITOU M; MATSUZAKI N; TATEBAYASHI M; UEDA H

Patent Family ( 11 patents, 19 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 1997014147	A1	19970417	WO 1996JP2901	A	19961004	199721	B
EP 802535	A1	19971022	EP 1996932824	A	19961004	199747	E
			WO 1996JP2901	A	19961004		
JP 9514906	X	19971222	WO 1996JP2901	A	19961004	199810	E
			JP 1997514906	A	19961004		
US 6289102	B1	20010911	WO 1996JP2901	A	19961004	200154	E
			US 1997849785	A	19971001		
JP 2004319085	A	20041111	JP 1997514906	A	19961004	200474	E
			JP 2004154000	A	20040524		
EP 802535	B1	20050615	EP 1996932824	A	19961004	200544	E
			WO 1996JP2901	A	19961004		
			EP 200426324	A	20041105		
DE 69634850	E	20050721	DE 69634850	A	19961004	200548	E
			EP 1996932824	A	19961004		
			WO 1996JP2901	A	19961004		
DE 69634850	T2	20060518	DE 69634850	A	19961004	200637	E
			EP 1996932824	A	19961004		
			WO 1996JP2901	A	19961004		
JP 2006179172	A	20060706	JP 2004154000	A	19961004	200644	E
			JP 20062786	A	20060110		
JP 3792236	B2	20060705	JP 1997514906	A	19961004	200644	E
			JP 2004154000	A	20040524		
JP 2006345555	A	20061221	JP 20062786	A	19961004	200703	E
			JP 2006198385	A	20060720		

#### Abstract:

The information recording medium has a **lead-in region** and a **data recording region**. Key information is recorded in the **lead-in region**, and **scrambled data** are recorded in the data recording region. **Descrambling** is performed based in the key information. First key information may be recorded in the **lead-in region**, and **second key** information in the data recording region, the **second key** information being converted based on the first key information to allow **descrambling**. ... The data recording region is divided into several sectors, each with an sector header for identification, and a main data region. The **second key** information is recorded in the sector header. ... An information recording medium includes a **lead-in area** and a data recording area. Key information is recorded in the **lead-in area**. **Scrambled data** is recorded in the data recording area. The **scrambled data** is **descrambled** based on the key information. ...

**Claims:**

1. An information **recording medium** comprising a **lead-in area** and a data recording **area**, wherein key information is recorded in the **lead-in area**, **scrambled data** is recorded in the data recording area, and the **scrambled data** is descrambled based on the key information... .. An information **recording disk medium** comprising a **lead-in area** and a data recording **area**, wherein the **lead-in area** is not accessible by devices **other** than a disk reproducing device, first key information is recorded in the **lead-in area**, **scrambled data** is recorded in the data recording area and, the **scrambled data** is descrambleable based on the first key information... .. An information **recording medium** comprising a **lead-in area** not accessible by devices **other** than a disk reproducing device and a data recording area, wherein key information is recorded in the **lead-in area**, **scrambled data** is recorded in the data recording area, and the **scrambled data** is descrambled based on the key information... Basic Derwent Week: 199721

File 347: JAPI O Dec 1976-2010/Dec(Updated 110323)

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File 350: Derwent WPIX 1963-2011/UD=201122

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Set	Items	Description
S1	614723	(RECORDING? OR RECORDABLE? OR WRITABLE? OR REWRITABLE?)(1N- (MEDI A? OR MEDI UM?) OR CD OR CDS OR CDROM? OR DVD OR DVDS OR MINI DISC? OR BLU( )RAY? ? OR BLURAY? ? OR (COMPACT? OR DIGITAL- ( )VERSATILE? OR MINI OR OPTICAL)(DISC? ? OR DISK? ?)
S2	9376157	AREA? ? OR REGION? ? OR SECTION? ? OR SECTOR? ? OR BLOCK? ? OR ZONE? ? OR PORTION? ? OR TRACK? ?
S3	394715	S2(3N)(RECORD??? OR WRIT??? OR STOR??? OR SAV??? OR ARCHIV- ???)
S4	79717	S3(5N)(PLURAL??? OR MULTI OR MULTIPLE OR MULTIPLICITY OR M- ULTITUDE? OR MORE(1N)ONE OR MANY OR SEVERAL? OR NUMEROUS? OR V- ARIOUS? OR SET OR SETS OR SERIES? OR COLLECTION? ? OR GROUP???- ?? OR ARRAY? ? OR TWO OR SECOND??? OR DUAL)
S5	6803	S1(15N)S4
S6	973425	CODE OR CODES OR KEY OR KEYS OR SIGNATURE? ?
S7	2391	S6(2N)(AUTHOR? ? OR AUTHORIZING? ? OR CREATOR? ? OR STUDIO? ? OR WRITER? ? OR PRODUCER? ? OR DISTRIBUTOR? ? OR (COPYRIGHT? OR RIGHTS)( )HOLDER? ? OR OWNER? ?) OR ASC
S8	208	S7(5N)(ENCRYPT? OR ENCOD? OR ENCRYPTER? OR ENCRYPTER? OR SEC- UR? OR SCRAMBL? OR CRYPTOGRAPH?)
S9	2028122	S2(5N)(SECOND??? OR 2ND OR ONE OR OTHER OR ANOTHER? OR DIFF- FER? OR SEPARAT? OR DISTINCT? OR DISCRETE? OR LEAD( )IN OR STA- TION??? OR TABLE(1W)CONTENT? ? OR TOC)
S10	4	S8(15N)S9
S11	1507400	S2(5N)(FIRST??? OR 1ST OR MAIN OR PRIMARY? OR DATA OR CONTE- NT? OR RECORD??? OR WRIT???)
S12	86	S7(5N)(DECRYPT? OR DECOD? OR DECRYPTER? OR DECRYPTER? OR UN- SCRAMBL? OR UNENCRYPT? OR UNENCODED? OR UNENCRYPTER? OR UNENCRYPT- ER? OR (NON OR "NOT" OR T OR WITHOUT OR NO)(1W(ENCRYPT? OR EN- COD? OR ENCRYPTER? OR ENCRYPTER? OR SECUR? OR SCRAMBL?))
S13	4	S11(15N)S12
S14	11	S8(15N)S12(15N)(MATCH??? OR CORRESPOND? OR CORRELAT? OR REL- AT? OR SAME OR IDENTICAL? OR EQUAL? OR EQUIVALEN? OR COMPAR? OR ASSOCIAT?)
S15	11	S5 AND (S10 AND S13) OR S14
S16	6	(S15 AND PY=1963:2003) OR (S15 AND AY=1963:2003 AND AC=US)
S17	6	IDPAT S16 (sorted in duplicate/non-duplicate order)
S18	49260	S1(7N)S2
S19	13	S18 AND S7
S20	13	S19 NOT S15
S21	10	(S20 AND PY=1963:2003) OR (S20 AND AY=1963:2003 AND AC=US)
S22	10	IDPAT S21 (sorted in duplicate/non-duplicate order)
S23	430	S7(10N)(MATCH??? OR CORRESPOND? OR CORRELAT? OR RELAT? OR - SAME OR IDENTICAL? OR EQUAL? OR EQUIVALEN? OR COMPAR? OR ASSO- CIAT?)
S24	0	S23 AND (S5 OR S18)
S25	22	S23 AND S1
S26	22	S25 NOT (S15 OR S19)
S27	11	(S26 AND PY=1963:2003) OR (S26 AND AY=1963:2003 AND AC=US)
S28	11	IDPAT S27 (sorted in duplicate/non-duplicate order)

File 348: EUROPEAN PATENTS 1978-201113  
(c) 2011 European Patent Office  
File 349: PCT FULLTEXT 1979-2011/UB=20110331|UT=20110324  
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Set	Items	Description
S1	363915	(RECORDING? OR RECORDABLE? OR WRITABLE? OR REWRITABLE?)(1N- (MEDI A? OR MEDI UM?) OR CD OR CDS OR CDROM? OR DVD OR DVDS OR MINI DISC? OR BLU-RAY? ? OR BLURAY? ? OR (COMPACT? OR DIGITAL- ( ) VERSATILE? OR MINI OR OPTICAL)( ) (DISC? ? OR DISK? ? )
S2	2672151	AREA? ? OR REGION? ? OR SECTION? ? OR SECTOR? ? OR BLOCK? ? OR ZONE? ? OR PORTION? ? OR TRACK? ?
S3	208343	S2(3N) (RECORD??? OR WRIT??? OR STOR??? OR SAV??? OR ARCHIVE- ???)
S4	54432	S3(5N) (PLURAL??? OR MULTI OR MULTIPLE OR MULTIPLICITY OR M- ULTITUDE? OR MORE(1N) ONE OR MANY OR SEVERAL? OR NUMEROUS? OR V- ARIOUS? OR SET OR SETS OR SERIES? OR COLLECTION? ? OR GROUP??- ?? OR ARRAY? ? OR TWO OR SECOND??? OR DUAL)
S5	5479	S1(15N) S4
S6	700700	CODE OR CODES OR KEY OR KEYS OR SIGNATURE? ?
S7	8163	S6(2N) (AUTHOR? ? OR AUTHORIZING? ? OR CREATOR? ? OR STUDIO? ? OR WRITER? ? OR PRODUCER? ? OR DISTRIBUTOR? ? OR (COPYRIGHT? OR RIGHTS) ) HOLDER? ? OR OWNER? ?) OR ASC
S8	538	S7(5N) (ENCRYPT? OR ENCOD? OR ENCRYPTER? OR ENCRYPTOR? OR SEC- UR? OR SCRAMBL? OR CRYPTOGRAPH?)
S9	1467712	S2(5N) (SECOND??? OR 2ND OR ONE OR OTHER OR ANOTHER? OR DIFF- FER? OR SEPARAT? OR DISTINCT? OR DISCRETE? OR LEAD() IN OR STA- RT??? OR TABLE(1W) CONTENT? ? OR TOO)
S10	40	S8(20N) S9
S11	893939	S2(5N) (FIRST??? OR 1ST OR MAIN OR PRIMARY? OR DATA OR CONTE- NT? OR RECORD??? OR WRIT???)
S12	196	S7(5N) (DECRYPT? OR DECOD? OR DECRYPTER? OR DECRYPTOR? OR UNS- CRAMBL? OR UNENCRYPT? OR UNENCODED? OR UNENCRYPTER? OR UNENCRYPTOR- ? OR (NON OR "NOT" OR T OR WITHOUT OR NO)(1W) (ENCRYPT? OR EN- CODE? OR ENCRYPTER? OR ENCRYPTOR? OR SECUR? OR SCRAMBL?)
S13	17	S11(20N) S12
S14	28	S8(15N) S12(15N) (MATCH??? OR CORRESPOND? OR CORRELAT? OR REL- LAT? OR SAME OR IDENTICAL? OR EQUAL? OR EQUIVALEN? OR COMPAR? OR ASSOCIAT?)
S15	0	S5(100N) ((S10(100N) S13) OR S14)
S16	37863	S1(7N) S2
S17	41	S16(100N) S7
S18	31	(S17 AND PY=1978:2003) OR (S17 AND AY=1978:2003 AND AC=US)
S19	31	IDPAT S18 (sorted in duplicate/non-duplicate order)
S20	1315	S7(10N) (MATCH??? OR CORRESPOND? OR CORRELAT? OR RELAT? OR - SAME OR IDENTICAL? OR EQUAL? OR EQUIVALEN? OR COMPAR? OR ASSO- CIAT?)
S21	20	S20(100N) (S5 OR S16)
S22	56	S20(100N) S1
S23	36	S21: S22 NOT S17
S24	19	(S23 AND PY=1978:2003) OR (S23 AND AY=1978:2003 AND AC=US)
S25	19	IDPAT S24 (sorted in duplicate/non-duplicate order)



File 8: Ei Compendex(R) 1884-2011/ Apr W  
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File 434: Sci Search(R) Cited Ref Sci 1974-1989/ Dec  
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File 56: Computer and Information Systems Abstracts 1966-2011/ Mar  
(c) 2011 CSA.

File 60: ANTE: Abstracts in New Tech & Engineer 1966-2011/ Mar  
(c) 2011 CSA.

File 438: Library Lit. & Info. Science 1984-2011/ Feb  
(c) 2011 The HW Wilson Co

Set	Items	Description
S1	1042430	(RECORDING? OR RECORDABLE? OR WRITABLE? OR REWRITABLE?)(1N- (MEDI A? OR MEDI UM?) OR CD OR CDS OR COMP/ OR DVD OR DVDS OR MINI DISC? OR BLU)RAY? ? OR BLURAY? ? OR (COMPACT? OR DIGITAL- ( ) VERSATILE? OR MINI OR OPTICAL)( ) (DISC? ? OR DISK? ?)
S2	12641123	AREA? ? OR REGION? ? OR SECTION? ? OR SECTOR? ? OR BLOCK? ? OR ZONE? ? OR PORTION? ? OR TRACK? ?
S3	130415	S2(3N) (RECORD??? OR WRIT??? OR STOR??? OR SAV??? OR ARCHIVE- ???)
S4	14062	S3(5N) (PLURAL??? OR MULTI OR MULTIPLE OR MULTIPLICITY OR MULTI- TUD? OR MORE(1N) ONE OR MANY OR SEVERAL? OR NUMEROUS? OR VA- RIOUS? OR SET OR SETS OR SERIES? OR COLLECTION? ? OR GROUP??- ?? OR ARRAY? ? OR TWO OR SECOND??? OR DUAL)
S5	738	S1(15N) S4
S6	3012583	CODE OR CODES OR KEY OR KEYS OR SIGNATURE? ?
S7	30260	S6(2N) (AUTHOR? ? OR AUTHORING? ? OR CREATOR? ? OR STUDIO? ? OR WRITER? ? OR PRODUCER? ? OR DISTRIBUTOR? ? OR (COPYRIGHT? OR RIGHTS)( ) HOLDER? ? OR OWNER? ?) OR ASC
S8	566	S7(5N) (ENCRYPT? OR ENCOD? OR ENCRYPT? OR ENCRYPT? OR SEC- UR? OR SCRAMBL? OR CRYPTOGRAPH?)
S9	1437311	S2(5N) (SECOND??? OR 2ND OR ONE OR OTHER OR ANOTHER? OR DIFF- FER? OR SEPARAT? OR DISTINCT? OR DISCRETE? OR LEAD( ) IN OR STA- RT??? OR TABLE(1W) CONTENT? ? OR TOC)
S10	1	S8(20N) S9
S11	845295	S2(5N) (FIRST??? OR 1ST OR MAIN OR PRIMARY? OR DATA OR CONTE- NT? OR RECORD??? OR WRIT???)
S12	99	S7(5N) (DECRYPT? OR DECOD? OR DECRYPT? OR DECRYPT? OR UNS- CRAMBL? OR UNENCRYPT? OR UNENCODE? OR UNENCRYPT? OR UNENCRYPT- P? OR (NON OR "NOT" OR T OR WITHOUT OR NO(1W) ENCRYPT? OR EN- CODE? OR ENCRYPT? OR ENCRYPT? OR SECUR? OR SCRAMBL?))
S13	0	S11(20N) S12
S14	0	S8(15N) S12(15N) (MATCH??? OR CORRESPOND? OR CORRELAT? OR RE- LAT? OR SAME OR IDENTICAL? OR EQUAL? OR EQUIVALENT? OR COMPAR? OR ASSOCIAT?)
S15	0	S5 AND (S10 OR S12)

S16	26179	S1(7N) S2
S17	7	S16 AND S7
S18	2647	S7(10N) (MATCH??? OR CORRESPOND? OR CORRELAT? OR RELAT? OR - SAME OR IDENTICAL? OR EQUAL? OR EQUIVALEN? OR COMPAR? OR ASSO- CIAT?)
S19	0	S18 AND (S5 OR S16)
S20	32	S18 AND S1
S21	139	S10 OR S12 OR S17 OR S20
S22	77	S21 NOT PY>2003
S23	64	RD S22 (unique items)
S24	515	S7 AND (COPY??? OR COPIE? ? OR REPRODUC? OR DUPLICAT?)
S25	12	S24 AND S1
S26	9	S25 NOT S21
S27	6	S26 NOT PY>2003
S28	6	RD S27 (unique items)

## Patent Search Results

17/3,K/1 (Item 1 from file: 350)  
 DIALOG(R)File 350: Derwent WPIX  
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**Method for providing access to information on data server of electronic business card system, involves encrypting information to be sent to data user by server, on determining that server has permission to transfer information**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: RICHARDS P J; TREVATHAN M B

Patent Family ( 2 patents, 1 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20070022302	A1	20070125	US 200282693	A	20020222	200730	B
			US 2006358812	A	20060221		
			US 2006528228	A	20060926		
US 7698746	B2	20100413	US 200282693	A	20020222	201027	E
			US 2006358812	A	20060221		
			US 2006528228	A	20060926		

### Claims:

if the step of comparing the check word and the data user public key indicates that the check word and the data user public key **match**, recording permission to transfer the information in an access list; encrypting the data owner public key, by the data user, using the data user private key, to provide an **encrypted data owner public key**; sending, from the data user to the data server, the **encrypted data owner public key** and a request to transfer the information to the data user; **decrypting the encrypted data owner public key** using the data user public key, to provide a second check word; **comparing** the second check word and the data owner public key; if the step of **comparing** the second check word and the data owner public key indicates that the second check word and the data owner public key match, checking the... .. Basic Derwent Week: 200730...

17/3,K/2 (Item 2 from file: 350)  
 DIALOG(R)File 350: Derwent WPIX  
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**Secure information access provision method for electronic business card system, involves permitting transfer of information in access list, if user public key and check number matches respectively with check word and preset sequence number**

Patent Assignee: RICHARDS P J (RICH-I); TREVATHAN M B (TREV-I); INT BUSINESS MACHINES CORP (IBMC)

Inventor: RICHARDS P J; TREVATHAN M B

Patent Family ( 2 patents, 1 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20060143468	A1	20060629	US 200282693	A	20020222	200652	B
			US 2006358812	A	20060221		
US 7203839	B2	20070410	US 200282693	A	20020222	200726	E
			US 2006358812	A	20060221		

### Claims:

the data server, the encrypted combination and a command that gives the data server permission to transfer the information to the data user; decrypting the **encrypted** combination, using the data

owner public key, to provide a **decrypted** combination; parsing the decrypted combination to provide a check word and a check number; **comparing** the check word and the data user public key; **comparing** the check number and an expected sequence number; if the step of comparing the check word and the data user public key indicates that the... and further if the step of comparing the check number and an expected sequence number indicates that the check number and the expected sequence number **match**, recording permission to transfer the information in an access list; encrypting the data owner public key, by the data user, using the data user private key, to provide an **encrypted data owner public key**; sending, from the data user to the data server, the **encrypted data owner public key** and a request to transfer the information to the data user; **decrypting** the **encrypted data owner public key**, using the data user public key, to provide a second check word; **comparing** the second check word and the data owner public key; if the step of **comparing** the second check word and the data owner public key indicates that the second check word and the data owner public key match, checking the... Basic Derwent Week: 200652

17/3,K/3 (Item 3 from file: 350)  
 DIALOG(R) File 350: Derwent WPIX  
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**Cryptographic system for secure key distribution and management for DVD copy protection**  
 Patent Assignee: INTEL CORP (ITLC)  
 Inventor: AUCSMITH D W

Patent Family ( 1 patents, 1 countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 5915018	A	19990622	US 1996740976	A	19961105	199936	B

#### Abstract:

NOVELTY: A portion of a digital video disc (DVD) is encoded with digital content **encrypted** under a content key which is **encrypted** under a public key and written out of band on another portion of the disc. An information handling system (206) is accessed by the player who receives the disc. ... USE - For secure key distribution and management for DVD copy protection. ... ADVANTAGE - The received compressed and **encrypted data** is decompressed and decrypted without exposing decrypted data or the cryptographic keys, as a result of which the DVD copy protection is not compromised. ... DESCRIPTION OF DRAWINGS - The figure shows the block diagram of cryptographic system where access to the DVD content is secure. ... A cryptographic system and method for secure distribution and management of cryptographic keys for use in a DVD copy protection scheme is disclosed. A DVD disc having compressed, **encrypted content** written on a first portion of the disc, and the content encryption key, itself **encrypted with a second key** and written out of band on a second portion of the disc is used to provide content, key, and control information to a DVD drive according to the present invention. The DVD drive is coupled to a decompressor and a video controller. The video controller and DVD drive engage in a handshaking protocol in which all of the communication between them is **encrypted**. After verifying that the video controller is registered and not known to be compromised, the DVD drive passes the content key and control information to the video controller, and the compressed, **encrypted content** to the decompressor. The content decompressed by the decompressor is communicated to the video controller where it. ...

#### Claims:

secure distribution of digital content, comprising: a) a machine readable medium, a first portion of which is encoded with digital content **encrypted** under a content key, and a second portion of which is encoded out of band with a content key **encrypted under a public key**; b) a player operable to receive the machine readable medium and read the contents thereof; c) an information handling system coupled to the player; and d) a video controller. ... Basic Derwent Week: 199936

17/3,K/4 (Item 4 from file: 350)  
 DIALOG(R) File 350: Derwent WPIX  
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**Information recording medium e.g. CD-ROM etc. - has key information recorded in lead-in region, and used for descrambling of data stored in data recording region**

Patent Assignee: MATSUSHITA DENKI SANGYO KK (MATU); MATSUSHITA ELECTRIC IND CO LTD (MATU)

Inventor: FUKUSHIMA Y; ITO M; ITOU M; MATSUZAKI N; TATEBAYASHI M; UEDA H

Patent Family ( 11 patents, 19 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 1997014147	A1	19970417	WO 1996JP2901	A	19961004	199721	B
EP 802535	A1	19971022	EP 1996932824	A	19961004	199747	E
			WO 1996JP2901	A	19961004		
JP 9514906	X	19971222	WO 1996JP2901	A	19961004	199810	E
			JP 1997514906	A	19961004		
US 6289102	B1	20010911	WO 1996JP2901	A	19961004	200154	E
			US 1997849785	A	19971001		
JP 2004319085	A	20041111	JP 1997514906	A	19961004	200474	E
			JP 2004154000	A	20040524		
EP 802535	B1	20050615	EP 1996932824	A	19961004	200544	E
			WO 1996JP2901	A	19961004		
			EP 200426324	A	20041105		
DE 69634850	E	20050721	DE 69634850	A	19961004	200548	E
			EP 1996932824	A	19961004		
			WO 1996JP2901	A	19961004		
DE 69634850	T2	20060518	DE 69634850	A	19961004	200637	E
			EP 1996932824	A	19961004		
			WO 1996JP2901	A	19961004		
JP 2006179172	A	20060706	JP 2004154000	A	19961004	200644	E
			JP 20062786	A	20060110		
JP 3792236	B2	20060705	JP 1997514906	A	19961004	200644	E
			JP 2004154000	A	20040524		
JP 2006345555	A	20061221	JP 20062786	A	19961004	200703	E
			JP 2006198385	A	20060720		

#### Abstract:

The information **recording medium** has a **lead-in region** and a **data recording region**. **Key** information is recorded in the **lead-in region**, and **scrambled** data are recorded in the data recording region. **Descrambling** is performed based in the key information. First **key** information may be recorded in the **lead-in region**, and **second key** information in the data recording region, the **second key** information being converted based on the first key information to allow **descrambling**. ... The data **recording region** is divided into **several sectors**, each with an sector header for identification, and a main data **region**. The **second key** information is recorded in the sector header. ... An information **recording medium** includes a **lead-in area** and a data recording **area**. Key information is recorded in the **lead-in area**. **Scrambled** data is recorded in the data recording area. The **scrambled** data is **descrambled** based on the key information. ...

#### Claims:

1. An information **recording medium** comprising a **lead-in area** and a data recording **area**, wherein

key information is recorded in the **lead-in area**, **scrambled** data is recorded in the data recording area, and the **scrambled** data is descrambled based on the key information... .. An information recording disk medium comprising a **lead-in area** and a data recording area, wherein the **lead-in area** is not accessible by devices other than a disk reproducing device, first key information is recorded in the **lead-in area**, **scrambled** data is recorded in the data recording area and, the **scrambled** data is descrambleable based on the first key information... .. An information recording medium comprising a **lead-in area** not accessible by devices other than a disk reproducing device and a data recording area, wherein key information is recorded in the **lead-in area**, **scrambled** data is recorded in the data recording area, and the **scrambled** data is descrambled based on the key information... Basic Derwent Week: 199721

17/3,K/5 (Item 5 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
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**Stored value system employing secure encryption protocol and using RF transponders for access systems - has host computer connected to read-write device over link generating secret and public key, and stores encryption data to generate validation signatures for changing transponder data, and distributes to read-write device**

Patent Assignee: HID CORP (HIDH-N); PALOMAR TECHNOLOGIES CORP (PALO-N)

Inventor: RASPOTHNIK W B

Patent Family ( 8 patents, 5 countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 758777	A2	19970219	EP 1996305271	A	19960718	199713	B
CA 2182464	A	19970211	CA 2182464	A	19960731	199724	E
EP 758777	A3	19970723	EP 1996305271	A	19960718	199743	E
US 5832090	A	19981103	US 1995513646	A	19950810	199851	E
CA 2182464	C	20010807	CA 2182464	A	19960731	200148	E
EP 758777	B1	20020925	EP 1996305271	A	19960718	200271	E
DE 69623893	E	20021031	DE 69623893	A	19960718	200279	E
			EP 1996305271	A	19960718		
ES 2183915	T3	20030401	EP 1996305271	A	19960718	200328	E

#### Claims:

transponder data from the reader/writer to the central host computer, wherein the reader/writer includes means for transforming the transponder data, for decrypting the **encrypted** validation signature using the public **key**, **comparing the decrypted validation signature** to the transformed transponder data and transmitting a value change command for the stored value in response to a **match between the decrypted validation signature** and the transformed transponder data. Basic Derwent Week: 199713

22/3,K/1 (Item 1 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
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**Disk manufacture control system e.g. for DVD, issues key information to disk manufacturing entity if authenticity of key information issue request from manufacturing entity is verified**

Patent Assignee: ASANO T (ASAN-I); KITANI S (KITA-I); MURAMATSU K (MURA-I); SONY CORP (SONY); TAKASHIMA Y (TAKA-I); YONEMITSU J (YONE-I)

Inventor: ASANO T; KITANI S; MURAMATSU K; TAKASHIMA Y; YONEMITSU J

Patent Family ( 6 patents, 36 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 1505596	A2	20050209	EP 2004254509	A	20040728	200518	B
JP 2005050176	A	20050224	JP 2003282336	A	20030730	200518	E
US 20050066167	A1	20050324	US 2004902212	A	20040728	200526	E
CN 1601642	A	20050330	CN 200410090519	A	20040730	200547	E
JP 4239741	B2	20090318	JP 2003282336	A	20030730	200921	E
CN 100545932	C	20090930	CN 200410090519	A	20040730	201001	E

**Abstract:**

information issue request from manufacturing entity is verified. The manufacturing entity manufactures the disk storing encrypted content obtained by encrypting the content from content rights **owner** and issued **key** information... issue entity (104). The key information issue request (152) is created based on an information recording medium manufacturing request (151) issued by a content rights **owner** (102). The key information issue entity (104) verifies authenticity of the key information issue request (152) and, depending on the legitimacy acknowledged as a result of such verification... an information recording medium manufacturing entity transmits a key information issue request created based on information recording medium manufacturing request issued by a content rights **owner** to a **key** information issue entity, verifies authenticity of the issued request and, depending on the legitimacy acknowledged as a result of such verification, issues a key information...

**Claims:**

said content rights owning entity to perform manufacturing processing of an information recording medium storing encrypted content; and key information issue entity providing said information **recording medium** manufacturing entity with a key information **block** capable of acquiring key information for decryption of said encrypted content in response to a key information issue request from said information recording medium manufacturing... information recording medium manufacturing request from said content rights owning entity, and, on condition that said authorized request data is verified, provides said key information **block** for said information **recording medium** manufacturing entity; and said information recording medium manufacturing entity comprises a configuration capable of manufacturing an information recording medium storing encrypted content made by encrypting... request requirement from the said content rights possession entity, and stored encryption content. It has a key information issuing entity which provides the said information **recording-medium** manufacture entity with the key information **block** which can acquire the key information which responds to the key information issue request from the said information recording-medium manufacture entity, and is applied... by this verification processing that they are valid request requirement data, the said information recording-medium manufacture entity is provided with the said key information **block**. The said information **recording-medium** manufacture entity, it has the structure which manufactures the information recording medium which stored the encryption content which encrypted the receipt content from the said... said content rights owning entity to perform manufacturing processing of an information recording medium storing encrypted content; and key information issue entity providing said information **recording medium** manufacturing entity with a key information **block** capable of acquiring key information for decryption of said encrypted content in response to a key information issue request from said information recording medium manufacturing... information recording medium manufacturing request from said content rights owning entity, and, on condition that said authorized request data is verified, provides said key information **block** for said information **recording medium** manufacturing entity; and said information recording medium manufacturing entity comprises a configuration capable of manufacturing an information recording medium storing encrypted content made by encrypting...

22/3,K/2 (Item 2 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
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**Information recording medium e.g. compact disk used with personal computer, has seed**

region arranged such that stored amend studio code and recording medium manufacturer code does not overlap with seed region

Patent Assignee: SONY CORP (SONY)

Inventor: ASANO T; KITANI S; MURAMATSU K; TAKASHIMA Y; YONEMITSU J; YONEMITSU

Patent Family ( 5 patents, 107 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2004109684	A1	20041216	WO 2004JP6619	A	20040511	200510	B
US 20060150251	A1	20060706	WO 2004JP6619	A	20040511	200645	E
			US 2005559518	A	20051206		
JP 2005506736	X	20060720	WO 2004JP6619	A	20040511	200648	E
			JP 2005506736	A	20040511		
TW 250759	B1	20060301	TW 2004112051	A	20040429	200717	E
TW 200501703	A	20050101	TW 2004112051	A	20040429	200958	E

#### Abstract:

NOVELTY - The information **recording medium** has region storing encrypted amend **studio code** (**ASC**) and **recording medium** manufacturer code (**DMC**). The medium has seed region serving as key production information, which is arranged such that none of the codes overlaps with the seed region. ... USE - Information **recording medium** e.g. compact disk (CD), digital versatile disk (DVD), DVD-ROM, DVD-video ROM, hard disk and mini disk (MD) used with personal computer (PC), CD player, DVD player, MD player and game machine for recording content such as image data, audio data, music, movie, game program and other application program. ... ADVANTAGE - Prevents the leakage of entity codes in the information **recording medium**. ... DESCRIPTION OF DRAWINGS - The figure shows the storage position of encrypted amend **studio code** and **recording medium** manufacturer code in the information **recording medium**. (Drawing includes non-English language text) ... The present invention provides a configuration for preventing each entity code stored in information **recording media** from being leaked. **Authoring studio code** (**ASC**) and disc manufacturer code (**DMC**) are encrypted without failure and the encrypted codes are stored in information **recording media**. The data setting location in program map table (PMT) is controlled such that these entity codes will not overlap the seed area that provides key generating information, so that, if the packet storing the program map table storing **authoring studio code** (**ASC**) and disc manufacturer code (**DMC**) is set to an arbitrary position in a content packet sequence, these entity codes will not overlap the seed area. ... An arrangement for preventing leakage of entity codes stored in an information **recording medium**. The arrangement ensures that amend **studio code** (**ASC**) and information **recording medium** manufacturer code (**DMC**) are encrypted and stored in an information **recording medium**. The data setting positions in a program map table (PMT) are controlled such that none of those codes overlaps with a seed region serving as key production information. As a result, even if the stored packets of the program map table storing therein the amend **studio code** (**ASC**) and information **recording medium** manufacturer code (**DMC**) are set to any position in the content packet sequence, then none of the entity codes overlaps with the seed region serving. ...

#### Claims:

1. An information **recording medium** storing encrypted content, having a configuration in which content and an entity code set for each entity in a manufacturing route of said information **recording medium**, and data included in a certain encryption processing unit is encrypted by a key generated on the basis of a seed providing encryption processing key...

22/3.K/3 (Item 3 from file: 350)

DIALOG(R)File 350: Derwent WPIX

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Blu-ray disk-read only memory for use with player, records copy protection-related information and copy protection -related information recording/ non-recording



# identification information, as wobbled pre-pit type

Patent Assignee: KIM J Y (KIMJ-I); LG ELECTRONICS INC (GLDS); SUH S W (SUHS-I)

Inventor: KIM J, KIM J Y; SEO S U; SUH S; SUH S W

Patent Family ( 9 patents, 108 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2004075193	A1	20040902	WO 2004KR338	A	20040219	200461	B
US 20040223427	A1	20041111	US 2003447706	P	20030219	200475	E
			US 2004780756	A	20040219		
KR 2004074583	A	20040825	KR 200373800	A	20031022	200501	E
EP 1597730	A1	20051123	EP 2004712781	A	20040219	200577	E
			WO 2004KR338	A	20040219		
TW 200423050	A	20041101	TW 2004104152	A	20040219	200612	E
CN 1764969	A	20060426	CN 200480007952	A	20040219	200654	E
JP 2006518529	W	20060810	WO 2004KR338	A	20040219	200654	E
			JP 2006502712	A	20040219		
US 7574003	B2	20090811	US 2004780756	A	20040219	200953	NCE
CN 1764969	B	20101124	CN 200480007952	A	20040219	201108	E

## Abstract:

NOVELTY - The **blu-ray** disk-read only memory (BD-ROM) has a permanent information and control data (PIC) **zone** in which copy **protection**-related information (CPI) and identification information (CPI flag) indicating recording/non-recording of the copy **protection**-related information are recorded as a wobbled pre-pit type.... **blu-ray** disk-read only memory forming apparatus; **blu-ray** disk-read only memory reproducing apparatus; and **blu-ray** disk-read only memory reproduction method.... USE - **Blu-ray** disk-read only memory (BD-ROM) for use with recorder, player.... ADVANTAGE - **Protects blu-ray** disk-read only memory from illegal copy effectively, and performs easy distinction between legal and illegal **blu-ray** disk-read only memory.... Disclosed herein are a **recording medium**, an apparatus for forming the **recording medium**, and an apparatus and method for reproducing the **recording medium**. CPI (Copy **Protection**-related Information), identification information (CPI).... **BD-ROM** formatter includes a copy protection control chip (CPCG). Inputted to the CPCG of the **BD-ROM** formatter is a contents **authoring code** file provided by the contents provider, which contains **control data**, such as CPI and a CPI flag, and main data such as an A/V stream. The **BD-ROM** formatter separates the control data and main data from the inputted contents **authoring code** file through the CPCG and formats the separated control data and main data such that they are suitable to a **BD-ROM** standard. Thereafter, the mastering machine makes a mass-copyable **master** using the output of the **BD-ROM** formatter inputted thereto.... For legal disc making, a legal contents **authoring code** file containing control data, such as legal CPI and a legal CPI flag, and **main data** is applied to the **BD-ROM** formatter. For example, here a **disc** to be legally made is of a copy protected mode type, legal contents **authoring code** file containing CPI and 'CPI\_Flag=1' is inputted to the **BD-ROM** formatter. Alternatively, where a **disc** to be legally made is of a copy free mode type, a legal contents **authoring code** file containing no CPI and only 'CPI\_Flag=0' is inputted to the **BD-ROM** formatter. The **BD-ROM** formatter formats the legal **control data** and **main data** separated through the CPCG such that they are suitable to the **BD-ROM** standard, and the mastering machine makes a master. However, in the case where the illegal **disc** copying is attempted, only a **data stream**, or **main data**, illegally stored in the storage medium is inputted to the **BD-ROM** formatter, or an illegal contents **authoring code** file containing the **main data** and illegal **control data** is inputted to the **BD-ROM** formatter. In this case, the **BD-ROM** formatter formats wrong **control data** containing a CPI flag fixed at 'CPI\_Flag=1' and wrong CPI or no CPI, and the **main data**.... the **optical disc**, and compulsorily stops a data playback operation upon judging that the disc has been illegally copied. Therefore, it is possible to effectively **protect** an **optical disc** from illegal copying, make an accurate and easy distinction between a legally made **optical disc** and an illegally made **optical disc**, and....

**Claims:**

1. A **recording medium**, comprising: a specific **area** in which copy **protection**-related information and identification information indicative of recording or non-recording of the copy **protection**-related information are recorded as a wobbled pre-pit type... The invention claimed is: 1. A computer readable **recording medium** for use in an apparatus for reproducing data stored in the computer readable **recording medium**, comprising: a specific **area** in which copy **protection**-related information and identification information indicative of recording or non-recording of the copy **protection**-related information are recorded as a wobbled pre-pit type, the copy **protection**-related information and the identification information causing the apparatus to determine whether or not the data is copied on the computer readable **recording medium** through a legal process.

22/3,K/4 (Item 4 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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**Authoring apparatus for video CD, has data output portion to group the keys with which contents have been encrypted, encrypt grouped keys, create grouped encrypted keys and output contents to recording medium**

Patent Assignee: SONY CORP (SONY)

Inventor: HIDACHI A; HITACHI A; KAZAMI S; OTA O; TSUCHIDA Y

Patent Family ( 3 patents, 33 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 1418581	A2	20040512	EP 200325486	A	20031106	200440	B
JP 2004165855	A	20040610	JP 2002327441	A	20021111	200440	E
US 20040151320	A1	20040805	US 2003700487	A	20031105	200452	E

**Abstract:**

The apparatus has a structure creating portion for encrypting input contents (11) with different keys and creating a structure for recording the contents on a **recording medium** e.g. **CD** (50). A data output **portion** groups the keys with which the contents have been encrypted and encrypts the grouped keys. The data output portion creates the grouped encrypted keys and... the contents have been encrypted, encrypts grouped keys with a disc key, and creates a key locker. A disc image creating portion creates image data to be recorded on a product **CD** with contents of a first session and a second session and the key locker. In accordance with the image data, the **CD** is produced. Since... encrypts grouped keys with a disc key, and creates a key locker. A disc image creating portion creates image data to be recorded on a product **CD** with contents of a first session and a second session and the key locker. In accordance with the image data, the **CD** is produced. Since...

**Claims:**

structure creating portion for encrypting a plurality of input contents with different keys and creating a structure for recording the plurality of contents on a **recording medium**; and a data output **portion** for grouping the plurality of **keys** with which the plurality of contents have been encrypted, encrypting the grouped keys, creating the grouped encrypted keys, and outputting the plurality of contents in a recordable format to the recording medium in accordance with the **structure created** by the structure creating **portion**, the grouped encrypted keys being output by the data output portion... What is claimed is: 1. An authoring apparatus, comprising: a structure creating portion for encrypting a plurality of input contents with different **keys** and creating a structure for recording the plurality of contents on a **recording medium**; and a data output **portion** for grouping the plurality of **keys** with which the plurality of contents have been **encrypted**, **encrypting** the grouped keys, creating the grouped **encrypted** keys, and outputting the plurality of contents in a recordable format to the recording medium in accordance with the **structure created** by the structure creating **portion**, the grouped encrypted keys being output by the data output **portion**.> ...Basic Derwent Week: EP 200325486

22/3,K/5 (Item 5 from file: 350)  
DIALOG(R)File 350: Derwent WPIX  
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**Digital audio content distribution management method e.g. for music, involves recognizing distributor's identification code to authenticate user for allowing to playback entire compact disk**

Patent Assignee: ONG CORP (ONGO-N); ONG L D (ONGL-I)

Inventor: ONG L D

Patent Family ( 4 patents, 100 countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20030195851	A1	20031016	US 2002372249	P	20020411	200375	B
			US 2003411986	A	20030411		
WO 2003088561	A1	20031023	WO 2003US11027	A	20030411	200380	E
AU 2003221854	A1	20031027	AU 2003221854	A	20030411	200436	E
JP 2005522745	W	20050728	JP 2003585351	A	20030411	200549	E
			WO 2003US11027	A	20030411		

**Abstract:**

PC) (114). If the distributor's identification (ID) code is recognized, the user is identified as an authorized person and allowed to playback the entire CD, else allowed to play only a limited portion of the CD... by their amplitude increment per short traversal times exceeding a predetermined level, and are flagged in the audio data file. A distributor or host ID code is embedded in the audio data file designating the authorized source or host environment for playback of the audio data file. A vector-decoding-enabled... Basic Derwent Week: 200375

22/3,K/6 (Item 6 from file: 350)  
DIALOG(R)File 350: Derwent WPIX  
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**Read-only digital optical disk used in commercial field, has default format that encodes implementation of variable user data format encoding published works encrypted by variable software algorithm**

Patent Assignee: MATSUSHITA DENKI SANGYO KK (MATU); MATSUSHITA ELECTRIC IND CO LTD (MATU)

Inventor: HAN Z; NELSON T J; ZOU H

Patent Family ( 3 patents, 2 countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2002140869	A	20020517	JP 2001246030	A	20010814	200250	B
US 20070143863	A1	20070621	US 2000640360	A	20000816	200741	E
			US 2007676607	A	20070220		
US 7249384	B1	20070724	US 2000640360	A	20000816	200749	E

**Abstract:**

A copy-resistant read-only digital **optical disc** having encrypted digital data. The copy-resistant read-only digital **optical disc** includes a digital work, a variable user-data format encoding said digital work after encryption with a variable software algorithm, an implementation of said variable... algorithm, and an implementation of said variable user data format encoded in a default format. The encrypted digital data is read on an adaptable digital **optical disc** player, which is adaptable to a user-data format described on said copy-resistant read-only digital **optical disc** made in accordance with this invention. A copy-resistant read-only digital **optical disc** made in accordance with this invention will

provide necessary user-data format information on the disc in a default format, which is always accessible by... ..

**Claims:**

What is claimed is: 1. An adaptable digital **optical disc** player for reading **encrypted** digital data, said player comprising: a mechanism that adapts to a copy-resistant read-only digital **optical disc**; wherein said copy-resistant read-only digital **optical disc** comprises a digital work, a variable software algorithm for **encrypting** said digital work, provided to a processor on said player, where a variable user-data format in a **second zone** **encodes** said digital work **encrypted** with said variable software algorithm, and a default format in a **first zone** encodes an implementation of said variable user-data format; wherein said **first zone** is located at an innermost predetermined **section** of said copy-resistant read-only digital **optical disc** and includes said implementation of said variable user-data format **encoded** in said default format; a drive which accepts said read-only digital **optical disc** including said **first** and **second zones** including said **encrypted** digital data and outputs a channel-signal stream; a controller which generates commands which cause said drive to access said **first** and **second zones** on said read-only digital **optical disc**; a default sequencer which accepts commands from said controller and said channel-signal stream from said drive and returns a data-byte stream in real-time from said read-only digital **optical disc** through said drive and said default sequencer; a multimedia processor which passes user requests from said adaptable digital **optical disc** player to said controller and receives said **encrypted** digital work and an implementation of said variable software algorithm from said controller; a programmable-sequencer which... .. commands and programmable-sequencer instructions from said controller and said channel-signal stream from said drive, and outputs a data-bit stream; a default ECC-**decoder** which accepts commands from said controller and said data-byte stream from said default sequencer; a programmable ECC-**decoder** which accepts programmable ECC-**decoder** commands and instructions from said controller and said data-bit stream from said programmable-sequencer; wherein said controller reads said implementation of said user-data format in said default format through said default sequencer and said default ECC-**decoder** into said programmable sequencer into said programmable sequencer and reads said implementation of said algorithm and said encrypted digital work through said programmable sequencer and said programmable ECC **decoder**; wherein said programmable-sequencer comprises: a programmable channel-bit converter which accepts channel configuration data from said controller and said channel-signal stream from said... Basic Derwent Week: 200250

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22/3,K/7 (Item 7 from file: 350)

DIALOG(R)File 350: Derwent WPIX

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**Unique identification method for digital content on digital content player, by receiving first, second and third identifiers, and producing fourth unique identifier based on mathematical combination of identifiers**

Patent Assignee: IBM CORP (IBM); INT BUSINESS MACHINES CORP (IBM); WISTRON CORP (WIST)

Inventor: DORACK J J; DORAK J J

Patent Family ( 12 patents, 30 countries )						
Patent Number	Kind	Date	Application Number	Kind	Date	Update Type
CN 1289100	A	20010328	CN 2000127012	A	20000914	200158 B
EP 1085443	A2	20010321	EP 2000308024	A	20000914	200212 ETAB
CA 2316762	A1	20010317	CA 2316762	A	20000817	200159 E
JP 2001160003	A	20010612	JP 2000279877	A	20000914	200159 E
KR 2001050381	A	20010615	KR 200053161	A	20000907	200171 E
US 6389403	B1	20020514	US 1998133519	A	19980813	200239 E
			US 1998177096	A	19981022	
			US 1999397419	A	19990917	
KR 444695	B	20040818	KR 200053161	A	20000907	200481 E
CA 2316762	C	20070403	CA 2316762	A	20000817	200726 E
CN 100345157	C	20071024				200830 E
EP 1085443	B1	20080827	EP 2000308024	A	20000914	200858 E
DE 60040041	E	20081009	DE 60040041	A	20000914	200868 E
			EP 2000308024	A	20000914	
JP 4347508	B2	20091021	JP 2000279877	A	20000914	200970 E

#### Abstract:

algorithm. Two keys are mathematically related. As a result, the data encrypted using one key are undecipherable if the other key is not used. The **owner** of a **key** keeps one key (private key) secret, and, generally distributes the 2nd key (public key). In order to protect transmission of a secret message using a message, a message owner calculates a message digest (it defines in the bottom) first. Then, a message digest is encrypted using an **owner's** private **key**. A message is distributed with the signature. The receipt side of a message can verify a digital signature by decoding a signature first using a message **owner's** public **key**, and recovering/restoring a message digest. Next, the receipt side calculates the received digest of a message and compares with the recovered/restored digest. When... The key 201 is public key or a private key. CLRNH showing the tooth/gear of a key, for example, a clearing house, shows the **owner** of a **key**. PB in a handle/steering-wheel shows that it is public key, therefore the key 201 is the public key of a clearing house. PV... tool to enable it to produce a series of content 113 for electronic distribution. For example, all the content 113 can be produced from the **track**|**truck** with which 1 or more **CD** which produces from a series of CDs, or is test|inspected by the content provider 101 was selected. The pre-processing parameter can be automatically... regenerate, if it clicks)- **Track**|**truck** name object- **Track**|**truck** information object- **Track**|**truck** lyric button- **Track**|**truck** lyric object- **Track**|**truck** artist name object- **Track**|**truck** credit button- **Track**|**truck** credit object- **CD** name object- **CD** credit button- **CD** credit object- General purpose (configurable) metadata button- General purpose metadata object, others. The following is contained in the function of the end user... system of an end user. Grouping of music similar to physical **CD** is stored as a reproduction list. In some cases, a reproduction list emulates **CD** correctly. (For example, when all the **track**|**trucks** of commercially available **CD** are purchased from the electronic digital content store 103 as an online edition of **CD** and are defined by the reproduction list equivalent to the... follows (It respond) corresponds to Screen 1601 of an end user interface.). - Reproduction|regeneration- Pause- Stop- It skips back- It skips to front- Volume control- **Track**|**truck** position adjusting- Lyric display- Credit display- **CD** cover display- Artist picture display- Presenting of **track**|**truck** information- Display of other metadata- Website visit- Reproduction list- Librarian, other the inside of implicitness when a digital content librarian digital content librarian selects music... Basic Derwent Week: 200158

22/3,K/8 (Item 8 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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**Copy protection arrangement in optical disk, utilizes title identifier code and classification code to control recorder to prohibit from making further copies**

Patent Assignee: EASTMAN KODAK CO (EAST)

Inventor: ASHE P R

Patent Family ( 1 patents, 1 countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6070799	A	20000606	US 199734654	P	19970108	200040	B
			US 1997902473	A	19970729		

#### Abstract:

NOVELTY - Optical disk (10) has a title identifier (ID) **code** to identify digital data, and classification **code**. Disk reader (30) reads and indicates the **code** and title ID to process and memory circuit (42). A recorder (31) controlled by processing unit, prohibits from making further copies, and permits to make only single copy from original disk, or does not restrict number of copies to be made by the **code**. USE - Used for limiting the number of copies of recorded data during recording information from original disk to another disk such as DVD , CD-ROM... ...ADVANTAGE - Makes use of barcode technology for providing copy protection for **recording medium**. Hence prevents unauthorized copies. Copy protection including single copy capability can effectively realized... Copy protection for an original **recordable medium** such as an optical disk having at least one recording surface which records digital information, including the digital information having a title ID **code** which identifies the digital information; and a copy classification **code** for the digital information which indicates to a recorder whether it is prohibited from making copies, permitted to make only a single copy or does...

#### Claims:

from an original disk having at least one recording surface which has a title ID that identifies the digital information, and having a copy classification **code** for the digital information identified by the title ID which indicates to a recorder whether the recorder is prohibited from making copies, permitted to make only a... original or does not restrict the number of copies to be made in a copying session, comprising: (a) means for reading and storing a unique **code** from a bar **code** on the **recordable medium**, the unique **code** identifying the original disk; (b) means for reading the title ID and the copy classification **code** from the original disk and for storing the title ID and the copy classification **code** on the first recordable disk **responsive** to the unique **code**; and (c) means responsive to the unique **code**, the title ID and the copy classification **code** for controlling the recorder including means responsive to the copy classification **code** for preventing the recorder from making a **copy** onto a second recordable disk in the copying session. Basic Derwent Week: 200040

22/3,K/9 (Item 9 from file: 350)

DIALOG(R)File 350: Derwent WPIX

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**Programmable code system for remotely controlling switching functions - uses multiple channels between transmitter and receiver, for conveying numerical code by infrared signals, for driving remote actuator**

Patent Assignee: FERPORT SAS DI BIASSONI & C M (FER-PN)

Inventor: BIASSONI M

Patent Family ( 2 patents, 25 countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 889453	A2	19990107	EP 1998111928	A	19980627	199906	B
IT 1297272	B	19990809	IT 1997MI1572	A	19970703	200170	E

#### Abstract:

The code is assembled hierarchically from plural partial codes, e.g. a **producer code**, set by encoder

(30), a **distributor code**, set by encoder (40), an installer code, set by encoder (50), an end-user personal code, set by encoder (60). The partial codes are assembled...

**Claims:**

said at least one encoding devices (30, 40, 50, 60) being adapted to supply to and store into said transmitter (10) and receiver (20) a **portion** or partial code (Cp, Cd, Ci, Cu) of said **enabling code** (CODE); ... Basic Derwent Week: 199906...

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22/3.K/10 (Item 10 from file: 350)

DIALOG(R)File 350: Derwent WPIX

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**Digital writing object distributing system for e.g. software, electronic publication used in CD-ROM, network environment - has terminal equipment to read and write information on memory medium at predetermined storing place identified by identification code**

Patent Assignee: HITACHI LTD (HITA)

Inventor: SANO K; YAGAWA Y

Patent Family ( 2 patents, 2 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 10021144	A	19980123	JP 1996172720	A	19960703	199814	B
US 6751598	B1	20040615	US 1997887251	A	19970702	200439	E

**Abstract:**

digital content updating unit of the terminal system transmits to a distributor a request for transmission of the digital content together with a user profile **code**. The **distributor** refers to a user management file to check the validity of the user profile code and the number of times of distribution. If they are valid, the latest edition... ..

**Claims:**

content, comprising: a drive unit for making an access to information in a storage medium mounted thereto, the storage medium having a read only storage **area** and a **rewritable** storage **area**; a digital content **access** permitting **section**, including a judging section connected to said drive unit for reading a code from a predetermined location on said storage medium and judging whether or... Basic Derwent Week: 199814

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28/3.K/1 (Item 1 from file: 350)

DIALOG(R)File 350: Derwent WPIX

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**Computer system for converting video information from uncompressed format to desired format, has memory for storing application having codes for processing raw video information and performing disk authoring operation**

Patent Assignee: MEDIOSTREAM INC (MEDI-N)

Inventor: HUANG Q

Patent Family ( 1 patents, 1 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20110044661	A1	20110224	US 2010907939	A	20101019	201118	B
			US 2007847190	A	20070829		
			US 2006342280	A	20060127		
			US 2002202999	A	20020723		

**Abstract:**

NOVELTY - Memory e.g. RAM (870) stores integrated software application having code to resize raw

video information to size **associated** with desired output media format. A disk **authoring code** for multiplexing elementary video stream into desired output media format and TV standard, to obtain video and audio information in presentation format is stored in... raw video information in uncompressed format to frame rate associated with desired TV standard is stored in memory. An **INDEPENDENT CLAIM** is included for computer **recordable medium** for storing program for converting video information... Basic Derwent Week: 201118...

28/3,K/3 (Item 3 from file: 350)  
DIALOG(R)File 350: Derwent WPIX  
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**Information providing apparatus for distribution of music, video data, compares encryption data using authentication key with received encryption data**

Patent Assignee: SONY CORP (SONY)

Inventor: HISAMATSU F; UENO S; YAMANAKA Y; YOSHINO K; YOSHITOMI K

**Patent Family ( 5 patents, 2 countries )**

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2003069558	A	20030307	JP 2001251588	A	20010822	200338	B
US 20030079042	A1	20030424	US 2002223798	A	20020820	200338	E
US 20060185022	A1	20060817	US 2002223798	A	20020820	200655	E
			US 2006405983	A	20060418		
US 7328458	B2	20080205	US 2002223798	A	20020820	200812	E
JP 4151246	B2	20080917	JP 2001251588	A	20010822	200863	E

**Claims:**

A recording means to record content data memorize|stored in the memory|storage means on an external storage **medium**; information **recording** management means which manages operation|movement of the said recording means; 1st internal certification|authentication means to certify|authenticate whether the said content data is... content key with a root key (Kroot); the authoring device including: means for receiving the content identifier (CID), authoring key enabling key (CEK) and the **authoring key** (CED) from the **authoring key** generator; means for storing content **corresponding** to the content identifier (CID); means for storing the content identifier (CID), authoring key enabling key (CEK) and the **authoring key** (CED); means for decrypting... Basic Derwent Week: 200338

28/3,K/5 (Item 5 from file: 350)  
DIALOG(R)File 350: Derwent WPIX  
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**Digital signature calculation system for securing program codes, obtains digital signature for signature target data from calculated partial signatures, using secret key of program code owner**

Patent Assignee: NEC CORP (NIDE)

Inventor: OBANA M; OBANA S

**Patent Family ( 4 patents, 2 countries )**

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20010016911	A1	20010823	US 2001760805	A	20010117	200158	B
JP 2001202012	A	20010727	JP 20009037	A	20000118	200158	E
JP 3584831	B2	20041104	JP 20009037	A	20000118	200472	E
US 7103775	B2	20060905	US 2001760805	A	20010117	200660	E



**Claims:**

a network; and remote hosts in the network which can be visited by the mobile agent, wherein: the base host includes: an agent execution environment **corresponding** to the base host for letting the mobile agent execute its program code; a random number generation means for generating random numbers; a partial signature auxiliary data generation means to which the random numbers generated by the random number generation means and a secret **key** of the owner of the mobile agent are inputted and which generates partial signature auxiliary data for distributing the information of the secret key of the owner of the mobile agent to... .. calculation for the partial signature auxiliary data generated by the partial signature auxiliary data generation means, and each remote host includes: an agent execution environment **corresponding** to the remote host for letting the mobile agent execute its program code; a partial signature calculation means to which signature target data, the signature target data being target data to which a digital... Basic Derwent Week: 200158

28/3,K/8 (Item 8 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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**Intelligent TV system for satellite broadcasting - outputs non-changing image codes such that complete non- changing image shifting occurs during modification of changing image according to camera position to obtain narrow bandwidth signals**

Patent Assignee: BRUMMETT P L (BRUM-I)

Inventor: BRUMMETT P L

Patent Family ( 1 patents, 1 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 5861905	A	19990119	US 1996700850	A	19960821	199911	B

**Abstract:**

facilitates usage in remote imaging. A high definition sound and image signals is generated by transmitting them in narrow bandwidth line. The data for broadcast, CD and other data is retrieved easily from the data stream packets. DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of intelligent camera and...

**Claims:**

said signals from said microphone means to said camera means and said camera processor means, said camera means including in said digital image codes, a **corresponding** sound code for said image, **studio** processor means having an operator input device for manipulating the digital codes generated by the camera processor means, said studio processor means separating the non-changing digital codes and changing image codes, identifying the non-changing codes... Basic Derwent Week: 199911

28/3,K/9 (Item 9 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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**Files protection method e.g. for optical writable disk - having storage layer which is capable of being disrupted when laser beam of sufficient intensity is focused with disk having transparent substrate layer on one side of storage layer and lacquer layer on other side**

Patent Assignee: EASTMAN KODAK CO (EAST)

Inventor: BROWNSTEIN S A, CUSHMAN T R, KLINE P J, LENTZ J P

Patent Family ( 1 patents, 1 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 5706266	A	19980106	US 1991810976	A	19911220	199808	B
			US 1992999626	A	19921231		
			US 1995432445	A	19950501		

**Abstract:**

The method involves physically embedding an identification signal group in a writable **optical disk**. A second identification signal group is stored in a file written on the writable **optical disk**. On initiation of interaction between an interaction system and the writable **optical disk**, a representation of the two identification **signal** groups is transferred to a **signal** processing unit of the interaction system. The two **identification signals** group representation in the **signal** processing unit and continuing interaction are **compared** between the interaction system and the writable **optical disk** only when the **comparison** between the two **identification signal** group representations is positive....A transferred file is decoded prior to processing by the processing unit. Where the interaction system has a third identification **signal** group associated with it, the method involves transferring a representation of the third **identification signal** group to the **signal** processing unit of the interaction system. The third and first **identification signal** group representations are **compared** in the **signal** processing unit. Continuing interaction between the interaction system and the writable **optical disk** only when the **comparison** between the first and third **identification signal** group representations is positive... disruptions provided by the laser beam are selected to provide human readable and/or machine readable patterns. To reduce the damage to portions of the **optical disk** other than the **storage** layer, the storage layer is exposed to the laser beam prior to curing, or prior to applying and curing the lacquer layer. The **optical disk** can be of the type with data written thereon during fabrication, or the disk can be of the type in which data can be impressed thereon after fabrication of the **optical disk**. The patterns on the **optical disk** can be in the form of optical bar codes. In one application of the present invention involving the type of disk on which data can be written after fabrication...

**Claims:**

A method of protecting files stored on an **optical** writable **disk**, said method comprising the steps of: physically embedding a **first identification signal** group in a writable **optical disk**; storing a **second identification signal** group in a file written on said writable **optical disk**; on initiation of interaction **between** an interaction system and said writable **optical disk**, transferring a representation of said first and said second **identification signal** group to a signal processing unit of said interaction system; **comparing** said first and said second **identification signal** group representation in said signal processing... wherein said interaction system has a third identification signal group associated therewith, said method further comprising the steps of transferring a representation of said third **identification signal** group to the signal processing unit of said interaction system and **comparing** said third and first **identification signal** group representations in said **signal** processing unit and continuing interaction between said **interaction system** and said writable **optical disk** only when said **comparison** between said first and third **identification signal** group representations is positive. Basic Derwent Week: 199808

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28/3,K/11 (Item 11 from file: 347)

DIALOG(R) File 347: JAPIO

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**DRIVING MECHANISM FOR OPTICAL HEAD FOR OPTICAL DISC**

Pub. No.: 57-167147 [JP 57167147 A]

Published: October 14, 1982 (19821014)

Inventor: OGOSHI SEIICHI

Applicant: TOSHIBA CORP (000307) (A Japanese Company or Corporation), JP (Japan)

Application No.: 56-053539 [JP 8153539]

Filed: April 09, 1981 (19810409)

Journal: Section: P, Section No. 168, Vol. 07, No. 10, Pg. 67, January 14, 1983 (19830114) ...

Published: 19821014)

**ABSTRACT:**

CONSTITUTION: A magnetic circuit 22 is formed which has comparatively wide magnetic gaps 21 extending in the direction of the radius of a disc-shaped **recording medium** (which is not shown in figure) and is closed in the terminal in the direction of the radius, and movable yokes 23 having a length... arranged in magnetic gaps 21. Partially narrow gaps 24 are formed, and AFC driving coils

25 for an optical head, ATC driving coils 26, and **ASC** driving coils 27 are provided in **relation** to these movable yokes 23. Movable yokes 23 move in accordance with the movement of the optical head in the direction of the radius to... DI01

DIALOG(R) File 348: EUROPEAN PATENTS  
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19/3K/5 (Item 5 from file: 348)

## Optical disk apparatus, optical disk recording method, and optical disk

### Patent Assignee:

- **Sony Corporation** (100224958)  
7-35, Kitashinagawa 6-chome Shinagawa-ku; Tokyo (JP)  
(Proprietor designated states: all)

### Inventor:

- **Kobayashi, Seiji**  
c/o Sony Corporation, 7-35, Kitashinagawa 6-chome; Shinagawa-ku, Tokyo; (JP)
- **Ito, Kazumine**  
c/o Sony Corporation, 7-35, Kitashinagawa 6-chome; Shinagawa-ku, Tokyo; (JP)
- **Horigome, Toshihiro**  
c/o Sony Corporation, 7-35, Kitashinagawa 6-chome; Shinagawa-ku, Tokyo; (JP)

### Legal Representative:

- **Meizer, Wolfgang et al (100004085)**  
Mitscherlich & Partner Patent- und Rechtsanwälte Postfach 33 06 09; 80066 Munchen; (DE)

	Country	Number	Kind	Date	
Patent	EP	1162615	A2	20011212	(Basic)
Patent	EP	1162615	A3	20040519	
Patent	EP	1162615	B1	20100901	
Application	EP	2001113898		20010607	
Priorities	JP	2000175574		20000607	

### Specification:

1D are schematic diagrams for explaining a mini disk used in the present invention;  
Fig. 2 is a flowchart showing a process of manufacturing the **mini disk** in Fig. 1;  
Fig. 3 is a **block diagram** showing a bar **code writer** in an embodiment of the present invention;  
Fig. 4 is a block diagram showing a 4-1 modulator in the bar **code writer** of Fig. 3;  
Fig. 5 is a **block diagram** showing an **optical disk** apparatus to access the **mini disk** of Fig. 1;  
Fig. 6 is a **block diagram** showing a second decoder in the **optical disk** apparatus of Fig. 5; and  
Fig. 7 is a block diagram showing a maximum detector in the second decoder of Fig. 6.  
DETAILED DESCRIPTION OF... ..next step in the optical disk manufacturing process 1, the copyright protective information ED outputted from a signal source 16 is recorded by a bar **code writer** 18, and subsequently the mini disk 2 is packaged and shipped. The bar **code writer** 18 modulates a high-output laser beam, which is emitted from a YAG (yttrium aluminum garnet) laser or the like, with the copyright protective information ED and then irradiates the modulated beam to an inner **area** of the **mini disk** 2 to change the information recording plane of the mini disk 2 locally and unrevsibly by the copyright protective information ED, thereby recording the copyright protective information ED. At

this time, the bar **code writer** 18 records the copyright protective information ED by irradiating a laser beam which is radially long and narrow in shape, thereby recording the copyright protective information ED like a bar code in a predetermined inner **area** of the **mini disk** 2. In this stage, the bar **code writer** 18 unversibly changes the information recording film, which is composed of a reflective film, by irradiation of the laser beam to thereby unversibly change the... ..2 containing the copyright protective information ED recorded as mentioned. The copyright protective information ED is recorded like a bar code in a predetermined inner **area** ARED of the **mini disk** 2. The **area** ARED for recording the copyright protective information ED is set to 0.8 mm in width around a diameter of 22.1 mm. The copyright...

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19/3K/6 (Item 6 from file: 348)

## System and method for processing protected data

### Patent Assignee:

- **Sony Corporation** (214029)  
6-7-35 Kitashinagawa, Shinagawa-ku; Tokyo 141 (JP)  
(Applicant designated States: all)

### Inventor:

- **Nonaka, Akira, Sony Corp., Intel. Prop. Dep.**  
6-7-35 Kitashinagawa, Shinagawa-ku; Tokyo 141; (JP)
- **Ezaki, Tadashi, Sony Corp., Intel. Prop. Dep.**  
6-7-35 Kitashinagawa, Shinagawa-ku; Tokyo 141; (JP)

### Legal Representative:

- **Pilch, Adam John Michael et al (50481)**  
D Young & Co 120 Holborn; London EC1N 2DY; (GB)

	Country	Number	Kind	Date	
Patent	EP	1130492	A2	20010905	(Basic)
Patent	EP	1130492	A3	20041110	
Application	EP	2000311199		20001214	
Priorities	JP	99361225		19991220	

### Specification:

and the signature data SIG1,ESC)) therefor, which are shown in Figs. 3B and 3C, stored in the securecontainer 104 recorded on the secure RAM **area** 132 of the **recording medium** (ROM 1301)), are written into the work memory 200 via the medium drive SAM manager 855. In step S51-3, after verifying the integrity of... ..KCP,P)). The signature processor 189 also verifies the integrity of the signature data SIGK1,ESC)) stored in the key file KF, i.e., the **creator** of the **key** file KF, by using the public key data KESC,P)) read from the storage unit 192. Subsequently, in step S51-4, after verifying the integrity...

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19/3K/7 (Item 7 from file: 348)

# CONTENTS MANAGEMENT SYSTEM, DEVICE, METHOD, AND PROGRAM STORAGE MEDIUM

## Patent Assignee:

- **Sony Corporation** (214028)  
7-35, Kitashinagawa 6-chome, Shinagawa-ku; Tokyo 141-0001 (JP)  
(Applicant designated States: all)

## Inventor:

- **ISHIBASHI, Yoshihito, Sony Corporation**  
7-35, Kitashinagawa 6-chome, Shinagawa-ku; Tokyo 141-0001; (JP)
- **OHISHI, Tateo, Sony Corporation**  
7-35, Kitashinagawa 6-chome, Shinagawa-ku; Tokyo 141-0001; (JP)
- **MUTO, Akihiro, Sony Corporation**  
7-35, Kitashinagawa 6-chome, Shinagawa-ku; Tokyo 141-0001; (JP)
- **KITAHARA, Jun, Sony Corporation**  
7-35, Kitashinagawa 6-chome, Shinagawa-ku; Tokyo 141-0001; (JP)
- **SHIRAI, Taizou, Sony Corporation**  
7-35, Kitashinagawa 6-chome, Shinagawa-ku; Tokyo 141-0001; (JP)

## Legal Representative:

- **DeVile, Jonathan Mark, Dr. et al (91151)**  
D. Young & Co 21 New Fetter Lane; London EC4A 1DA; (GB)

	Country	Number	Kind	Date	
Patent	EP	1128598	A1	20010829	(Basic)
	WO	200119017		20010315	
Application	EP	2000956997		20000907	
	WO	2000JP6089		20000907	
Priorities	JP	99253660		19990907	
	JP	99253661		19990907	
	JP	99253662		19990907	
	JP	99253663		19990907	
	JP	99260638		19990914	
	JP	99264082		19990917	
	JP	99265866		19990920	

## Specification:

time, supplies the information on profit distribution, and receives information (a handling policy) to be attached to the contents, if necessary. A copying right management section 13 transmits information indicating results of content utilization of the user home network 5 to an organization managing copying rights, e.g., JASRAC (Japanese Society for Rights of Authors, Composers and Publishers). A key server 14 performs generation, maintenance, management of keys used for the entire system, and the individual key Kd) different for...supplied to an authentication station 22, if necessary, and the delivery key Kd) is supplied to the user home network 5 via a user management section 18. In addition, a public key and a secret key of the electronic distribution center 1 as well as a public key and a secret...

**Recording medium, method and apparatus for producing recording medium and data recording method and apparatus**

**Patent Assignee:**

- **SONY CORPORATION (214024)**  
7-35, Kitashinagawa 6-chome Shinagawa-ku; Tokyo (JP)  
(Applicant designated States: all)

**Inventor:**

- **Furukawa, Shunsuke**  
c/o Sony Corporation, 7-35, Kitashinagawa 6-chome; Shinagawa-ku, Tokyo; (JP)
- **Sako, Yoichiro**  
c/o Sony Corporation, 7-35, Kitashinagawa 6-chome; Shinagawa-ku, Tokyo; (JP)

**Legal Representative:**

- **Nicholls, Michael John (61941)**  
J.A. KEMP & CO. 14, South Square Gray's Inn; London WC1R 5JJ; (GB)

	Country	Number	Kind	Date	
Patent	EP	1081698	A2	20010307	(Basic)
Patent	EP	1081698	A3	20030423	
Application	EP	2000307442		20000830	
Priorities	JP	99246549		19990831	

**Specification:**

generate a key. The information converted from the sector addresses 128, 129, 130, (center dot)(center dot)(center dot), 32766, 32767 is recorded in the **area 5** of the disc-shaped **recording medium 1**. Meanwhile, in the disc-shaped recording medium 1, an encryption key may be recorded in a pre-set **area** for address data of the disc-shaped **recording medium 1**, such as in a **sector 127**. If data including main data is recorded in the pre-set area by a data recording apparatus, as later explained, an encryption key may also be recorded in the data sector. Moreover, a **code** of a **producer** of the disc-shaped recording medium or an ID of the disc-shaped recording medium 1 may be substituted for part or all of the...

**Method and system for digitally compensating for film unit defects**

**Patent Assignee:**

- **EASTMAN KODAK COMPANY** (201212)  
343 State Street; Rochester, New York 14650 (US)  
(Applicant designated States: all)

**Inventor:**

- **Smart, David C., c/ o Eastman Kodak Co.**  
Patent Legal Staff, 343 State Street; Rochester, New York 14650-2201; (US)
- **Cipolla, David, c/ o Eastman Kodak Co.,**  
Patent Legal Staff, 343 State Street; Rochester, New York 14650-2201; (US)

**Legal Representative:**

- **Weber, Etienne Nicolas et al (91684)**  
Kodak Industrie, Departement Brevets, CRT, Zone Industrielle; 71102 Chalon sur Saone Cedex; (FR)

	Country	Number	Kind	Date
Patent	EP	1016923	A2	20000705 (Basic)
Patent	EP	1016923	A3	20040128
Application	EP	99204204		19991208
Priorities	US	221420		19981228

**Specification:**

10 and a single associated logical memory unit 20. Unique identifiers 42 can be readily provided by use of non-repeating sequences of numbers or **codes**. If different **producers** are likely to use the same numbers, then it is also desirable that producer identification also be included in the identifiers 42 to ensure uniqueness. The identifier 42 is printed on a film unit 10 or recorded in some other manner, such as digital recording on an **area** of magnetic or optical **recording media**. The identifier 42 is human or machine-readable or both prior to exposure of images. It is preferred that the identifier 42 be recorded independently...

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DIALOG(R) File 348: EUROPEAN PATENTS  
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19/3K/21 (Item 21 from file: 348)

**Recording medium having text information recorded in a plurality of subcode channels and reproducing apparatus**

**Patent Assignee:**

- **SONY CORPORATION** (214024)  
7-35, Kitashinagawa 6-chome Shinagawa-ku; Tokyo (JP)  
(Proprietor designated states: all)

**Inventor:**

- **Yokota, Teppei, c/ o Sony Corp.**  
7-35, Kitashinagawa 6-chome, Shinagawa-ku; Tokyo; (JP)

**Legal Representative:**

- **Melzer, Wolfgang, Dipl.-Ing. et al (8278)**  
Patentanwalte Mitscherlich & Partner, Sonnenstrasse 33; 80331 Munchen; (DE)

	Country	Number	Kind	Date
Patent	EP	791925	A2	19970827
Patent	EP	791925	A3	19990519
Patent	EP	791925	B1	20011114
Application	EP	96115085		19960919
Priorities	JP	95244959		19950922

#### Claims:

of the program information recorded in the program area, a classification of the program information recorded in the program area, and a name of a **producer**; a **code** determining whether or not the letter information associated with each program information type recorded in the program area can be copied on another **recording medium**; a code identifying a conversion code format of the letter information associated with each program information type recorded in the program area; a code identifying... decoding; and display means (58) for displaying the decoded character information from the decoding means.

18. The system as claimed in claim 17, wherein management **area** of the disc-shaped **recording medium** is recorded with a plurality of identifiers for identifying the type of the character information, the plurality of identifiers including at least three of the... ..of the program information recorded in the program area, a classification of the program information recorded in the program area, and a name of a **producer**; a **code** determining whether or not the character information associated with each program information type recorded in the program **area** can be copied on another **recording medium**; a code identifying a conversion code format of the character information associated with each program information type recorded in the program area; a code identifying... ..of the program information recorded in the program area, a classification of the program information recorded in the program area, and a name of a **producer**; a **code** determining whether or not the character information associated with each program information type recorded in the program **area** can be copied on another **recording medium**; a code identifying a conversion code format of the character information associated with each program information type recorded in the program area; a code identifying...

DIALOG(R) File 348: EUROPEAN PATENTS  
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19/3K/22 (Item 22 from file: 348)

#### Compact disc player security system reproducing method and apparatus

##### Patent Assignee:

- **Sony Computer Entertainment Inc.** (3064090)  
7-1-1 Akasaka, Minato-ku; Tokyo 107-0052 (JP)  
(Proprietor designated states: all)

##### Inventor:

- **Kutaragi, Ken, c/ o Sony Corporation**  
7-35, Kitashinagawa 6-chome; Shinagawa-ku, Tokyo; (JP)
- **Hirano, Tetsuya, c/ o Sony Corporation**  
7-35, Kitashinagawa 6-chome; Shinagawa-ku, Tokyo; (JP)



**Legal Representative:**

- **Muller, Frithjof E., Dipl.-Ing. et al (8661)**  
Patentanwalte MULLER & HOFFMANN, Innere Wiener Strasse 17; 81667 Munchen; (DE)

	Country	Number	Kind	Date
Patent	EP	723216	A2	19960724 (Basic)
Patent	EP	723216	A3	19960904
Patent	EP	723216	B1	20010620
Application	EP	95118162		19951117
Priorities	JP	94285390		19941118

**Specification:**

ROM disc and security check method for the same. A security code is recorded in a predetermined code region in a sector of a boot **sector** in the innermost **track** of the **CD ROM** disc. The security code indicates that the CD ROM disc is duly licensed, namely by a television game machine **producer**. The security **code** further may contain a program to be executed after a checking operation of the security code. This document does not disclose a special modulation scheme...

19/3K/23 (Item 23 from file: 349)  
DIALOG(R) File 349: PCT FULLTEXT  
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**RECORDING MEDIUM, APPARATUS FOR FORMING THE RECORDING MEDIUM, AND APPARATUS AND METHOD FOR REPRODUCING THE RECORDING MEDIUM**

**Patent Applicant/ Patent Assignee:**

- **LG ELECTRONICS INC**  
20, Yoido-dong, Youngdungpo-gu, Seoul 150-010; KR; KR(Residence); KR(Nationality); (For all designated states except: US)

**Patent Applicant/ Inventor:**

- **KIM Jin Yong**  
109-602, Seonkyung Apt., Yatap-dong, Bundang-gu, Seongnam, Kyunggi-do 463-928; KR; KR(Residence); KR(Nationality); (Designated only for: US)
- **SUH Sang Woon**  
110-709, Hyundai Apt., 1346, Seocho 2-dong, Seocho-gu, Seoul 137-861; KR; KR(Residence); KR(Nationality); (Designated only for: US)

**Legal Representative:**

- **PARK Lae Bong (agent)**  
1Fl., Dongun Bldg., 413-4, Dogok 2-dong, Kangnam-gu, Seoul 135-272; KR

	Country	Number	Kind	Date
Patent	WO	200475193	A1	20040902
Application	WO	2004KR338		20040219
Priorities	US	2003447706		20030219

	Country	Number	Kind	Date
	KR	1020030073800		20031022

#### Detailed Description:

etc. being included in outputted main 15 data. However, where the control data is not legal or there is no control data in the contents **authoring code** file, the CPCC generates and outputs control data containing a CPI flag fixed at 'CPI-Flag=1' and wrong CPI or no CPI. In particular... ..the generated CSI being included in the outputted control data and the others being included in the outputted main data, respectively. Fig. 10 is a **block** diagram showing the configuration of an **optical disc** device for reproducing the BD-ROM according to the second embodiment of the present invention while judging whether it is an illegally copied disc. As...

19/3K/25 (Item 25 from file: 349)

DIALOG(R)File 349: PCT FULLTEXT

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## SYSTEM FOR MANAGING DISTRIBUTION OF DIGITAL AUDIO CONTENT

#### Patent Applicant/ Patent Assignee:

- **ONG CORP**  
481 Hackensack Avenue, Hackensack, NJ 07601; US; US(Residence); US(Nationality)

#### Inventor(s):

- **ONG Lance D**  
481 Hackensack Avenue, Hackensack, NJ 07601; US

#### Legal Representative:

- **CHONG Leighton K (agent)**  
Ostrager Chong & Flaherty (Hawaii), 841 Bishop Street, Suite 1200, Honolulu, HI 96813; US

	Country	Number	Kind	Date
Patent	WO	200388561	A1	20031023
Application	WO	2003US11027		20030411
Priorities	US	2002372249		20020411

#### Detailed Description:

number of times on any compatible (vector-decoding-enabled) player having firmware enabling playback of the vector-encoded audio file, indicated at Block 111. A **distributor ID code** may be used initially in place of a host-ID code, and is recognized by the player as permitting full playback of the audio file from the CD. However, when the vector-encoded audio file is copied ("ripped") from the CD, at Block 112, or down loaded from the Internet, at Block 113, to a host environment, such as a personal computer (PC) indicated... ..audio file before playback, at Block 116. If the audio file has been loaded from a legitimately purchased CD, the WaveTrace player checks for the **distributor's ID code**, at Block 117. If the distributor's ID code is recognized, the WaveTrace player changes it to a host-ID code identifying the user as...

19/3K/26 (Item 26 from file: 349)  
DIALOG(R)File 349: PCT FULLTEXT  
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## IMPROVEMENTS RELATING TO SECURITY IN DIGITAL DATA DISTRIBUTION

### Patent Applicant/ Patent Assignee:

- CERBERUS CENTRAL LIMITED**  
2 Princes Street, London W1R 7RA; GB; --(Residence); --(Nationality); (For all designated states except: US)

### Patent Applicant/ Inventor:

- FARIA Richard**  
Cerberus Central Limited, 2 Princes Street, London W1R 7RA; GB; GB(Residence); GB(Nationality); (Designated only for: US)

### Legal Representative:

- AHMAD Sheikh Shakeel(et al)(agent)**  
David Keltie Associates, Fleet Place House, 2 Fleet Place, London EC4M 7ET; GB

	Country	Number	Kind	Date
Patent	WO	200379349	A2-A3	20030925
Application	WO	2003GB1085		20030314
Priorities	GB	20026034		20020314
	GB	200211134		20020515

### Detailed Description:

CD formats can be found at the following web site, [www.ee.washington.edu/conselec/CE/k-uhn/cdaudio2/95x7.htm](http://www.ee.washington.edu/conselec/CE/k-uhn/cdaudio2/95x7.htm). The audio on a CD is divided into a maximum of 99 tracks. Each track must be at least four seconds in length, and a pause of two seconds may be inserted between tracks. The audio may be... should be included to identify that track uniquely. The ISRC comprises 12 characters divided as shown in the table below.

Length (chars) Description

2 Country code

3 First owner (allocated by Phonographic Performance Ltd for audio)

2 Year of recording (the last two digits)

5 Designation code (...a table of contents (TOC). The TOC usually includes the timecode for each track (as minutes, seconds and sometimes frames) and is used to enable CD players to "know" where each track is on the CD. The TOC may also define the track type which, for some CD formats, can be audio or data. In addition to the main data channel (which may contain audio or other, data), there are eight subcode channels...

19/3K/27 (Item 27 from file: 349)  
DIALOG(R)File 349: PCT FULLTEXT  
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## METHOD AND DEVICE FOR DATA TRANSFER TO AND FROM A CD

**Patent Applicant/ Patent Assignee:**

- **DOC WITNESS LTD**  
8 Hamelacha Street, Rish Haayin 48091; IL; IL(Residence); IL(Nationality); (For all designated states except: US)

**Patent Applicant/ Inventor:**

- **LOEWIDT Amos**  
8 Hamelacha Street, 48091 Rosh Haayin; IL; IL(Residence); IL(Nationality); (Designated only for: US)

**Legal Representative:**

- **FRIEDMAN Mark M (agent)**  
Beit Samueloff, 7 Haomanim Street, 67897 Tel Aviv; IL

	Country	Number	Kind	Date
Patent	WO	200341067	A2-A3	20030515
Application	WO	20021L889		20021107
Priorities	IL	146414		20011108

**Detailed Description:**

as a musical CD-ROM, DVD or a soft-ware installation CD-ROM disc. Further pressing of the drive D display icon displays data from **CD ROM area 160**, and initiates an identification process. The computer ...ROM data uploaded into the CPU of the PC directs the PC back to card 100 to locate the necessary validation information including card **owner passwords, codes**, and other security tools. The card access control information can also be stored on both the card **CD** or **DVD ROM** recordable **area 160** as well as chip 102 ROM and RAM and EPROM regions. However, chip 102 cannot be accessed through its electrical contacts of terminal 170...and EPROM areas is enabled through tile input/output region of optical data **area 140**. As a result Of Start-Lip operating instructions read from **area 160**, the computer **CD** or **DVD** drive reading lens beam is directed to read specific sector of tracks on card 100, which are in effect optical data **area 140**. Data emission...

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19/3K/29 (Item 29 from file: 349)  
DIALOG(R) File 349: PCT FULLTEXT  
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**METHOD FOR STEGA-CIPHER PROTECTI ON OF COMPUTER CODE**

**Patent Applicant/ Patent Assignee:**

- **THE DICE COMPANY**

**Inventor(s):**

- **MOSKOWITZ Scott A**
- **COOPERMAN Marc**

	Country	Number	Kind	Date
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	Country	Number	Kind	Date
Patent	WO	9726732	A1	19970724
Application	WO	97US651		19970116
Priorities	US	96587943		19960117

#### Claims:

the software which is accessing the watermark where license information consists of one or more of the following items: owning organization name; Personal Owner name; **Owner Address**; **License code**; Software serialization number; Distribution parameters; Appropriate executable general computing device architecture; Pricing; and Software Metering details.

3 The method of claim 1 further comprising the... via a transmission means, from a publisher to a subscriber wherein transmission means can be selected from the group of soft sector magnetic disk media; hard sector magnetic disk media; magnetic tape media; **optical disc** media; Digital Video Disk media; magneto-optical disk media; memory cartridge; telephone lines; 16SCSI; is Ethernet or Token Ring Network; ISDN; ATM network; TCP...

DIALOG(R) File 348: EUROPEAN PATENTS

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25/3K/4 (Item 4 from file: 348)

#### Method and terminal device for preventing unauthorized use of secured content files

#### Patent Assignee:

- **Nokia Corporation** (2963881)  
Keilalahdentie 4; 02150 Espoo (FI)  
(Applicant designated States: all)

#### Inventor:

- **Rahnasto, Ilkka, J.**  
Riekkopolkku 3B; 01450 Vantaa; (FI)

#### Legal Representative:

- **Becker Kurig Straus (101571)**  
Patentanwalte Bavariastrasse 7; 80336 Munchen; (DE)

	Country	Number	Kind	Date
Patent	EP	1890247	A2	20080220 (Basic)
Patent	EP	1890247	A3	20080917
Application	EP	2007020059		20010427
Priorities	US	661211		20000428

#### Specification:

the distributor code for a distributor authorized to distribute the content file and a key code that is formed as a combination of the identification **code** and the **distributor code**. The terminal device needs to have the key code that **matches** the identification **code** and the **distributor code** in order to properly receive and use the content file. The administrator may distribute several key codes each

representing a different content file or a... the terminal devices 40 and 60 may be constructed in a similar manner. The data 60 may be a locally-stored medium such as a CD-ROM, a magnetic diskette, a tape, etc. or the data may be accessed through a network such as the Internet or the data 60 may...

DIALOG(R) File 348: EUROPEAN PATENTS  
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25/3K/5 (Item 5 from file: 348)

## Reproducing apparatus and server system providing additional information therefor

### Patent Assignee:

- **SAMSUNG ELECTRONICS CO., LTD.** (1093728)  
104-906 Dongbo Apt. 45, Tanbeol-ri, Gwangju-eup; Gwangju-gun, Gyeonggi-do; (KR)  
(Applicant designated States: all)

### Inventor:

- **Chung, Hyun-kwon**  
104-906 Dongbo Apt. 45, Tanbeol-ri, Gwangju-eup; Gwangju-gun, Gyeonggi-do; (KR)
- **Heo, Jung-Kwon, 203-504 Jugong 2-danji Apt.**  
18-1 Banpo 2-dong, Seocho-gu; Seoul; (KR)

### Legal Representative:

- **Chugg, David John et al (78311)**  
Appleyard Lees, 15 Clare Road; Halifax, West Yorkshire HX1 2HY; (GB)

	Country	Number	Kind	Date	
Patent	EP	1239376	A2	20020911	(Basic)
Patent	EP	1239376	A3	20050209	
Application	EP	2001305330		20010619	
Priorities	KR	201012444		20010310	

### Specification:

present invention. One or more contents # 1, # 2, ..., and # N and an international standard recording code (ISRC) given to the contents are recorded in an **optical disc 1**, which is a **recording medium** according to the present embodiment. The ISRC code is an international standard code used for distinguishing music, songs, music videos and is given by the Recording Industry **Association of America (RIAA)**. The ISRC code includes **country code**, **copyright holder code**, year of recording, and recording number. A reproduction apparatus 10 includes an identifier generator 11, a controller 12, a network connector 13, a reading unit... recorded in the storage medium 1. The identifier generated according to the present invention is the ISRC code. The ISRC code is read from the **optical disc 1** by the reading unit 15 and is provided to the identifier generator 11. The network connector 13, which is a connection interface to be...

25/3K/8 (Item 8 from file: 349)  
DIALOG(R) File 349: PCT FULLTEXT  
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**SYSTEM, METHOD AND APPARATUS FOR SECURELY PROVIDING CONTENT VIEWABLE ON A SECURE DEVICE**

**Patent Applicant/ Patent Assignee:**

- **WIDEVINE TECHNOLOGIES INC**  
900 Fourth Avenue, Suite 3400, Seattle, WA 98164; US; US(Residence); US(Nationality); (For all designated states except: US)

**Patent Applicant/ Inventor:**

- **MORTEN Glenn A**  
6035 173rd Avenue S.E., Bellevue, WA 98006; US; US(Residence); US(Nationality); (Designated only for: US)

**Legal Representative:**

- **BRANCH John W(et al)(agent)**  
Darby & Darby P.C., P.O. Box 5257, New York, NY 10150-5257; US

	Country	Number	Kind	Date
Patent	WO	200484035	A2-A3	20040930
Application	WO	2004US8202		20040316
Priorities	US	2003455723		20030318
	US	2004760642		20040120

**Detailed Description:**

variety of content - media II 2, including, but not limited to a DVD, high definition DVD, Video Compact Disc (VCD), Super VCD (SVCD), Super Audio CD (SACD), and the like. For example, secure content may be copied and distributed on a Dynamic Digital Sound (DDS) content media. Moreover, distributor 106 may also copy and distribute secure content on a Read/Write DVD, CD-Recordable (CD-R), and substantially similar content media. Distributor 106 is not limited to copying and distributing secure content --WO 2004/084035 PCT/US2004/008202 on DVD and CD content media technologies, and virtually any other content media technology may be employed without departing from the scope of the present invention.. Distributor 106 may receive one or more screener keys **associated** with the one or more **key** packages. **Distributor** 106 may also receive authorization information from a variety of trusted sources that indicate whether a user has authorization to access the secure content. Provided...

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25/3K/15 (Item 15 from file: 349)  
DIALOG(R)File 349: PCT FULLTEXT  
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**METHOD AND APPARATUS FOR SECURE IDENTIFICATION FOR NETWORKED ENVIRONMENTS**

**Patent Applicant/ Patent Assignee:**

- **CK GLOBAL INC**  
14211 Livingston, Tustin, CA 92780; US; US(Residence); US(Nationality); (For all designated states except: US)

**Patent Applicant/ Inventor:**

- **AARONS Michael Thomas**  
17299 Flametree Circle, Fountain Valley, CA 92708; US; US(Residence); US(Nationality);  
(Designated only for: US)

**Legal Representative:**

- **ALTMAN Daniel E (agent)**  
Knobbe, Martens, Olson & Bear, LLP, 620 Newport Center Drive, 16th Floor, Newport Beach, CA 92660; US

	Country	Number	Kind	Date
Patent	WO	200212983	A2-A3	20020214
Application	WO	2001US41573		20010806
Priorities	US	2000223204		20000804

**Detailed Description:**

this manner, the data is kept secure in the event that the invention is lost or stolen. Although the data can be read in any CD ROM recorder, encryption keeps the data from being used in a fraudulent manner.

[0019] Prior art, such as credit cards, make use of the **owner's** cursive **signature** to be used in **comparison** to signify proper- and legal-use. -This invention,- in one of its forms, allows the owner's cursive signature to be digitally scanned and stored...

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25/3K/16 (Item 16 from file: 349)  
DIALOG(R) File 349: PCT FULLTEXT  
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**METHOD AND TERMINAL DEVICE FOR PREVENTING UNAUTHORIZED USE OF SECURED CONTENT FILES**

**Patent Applicant/ Patent Assignee:**

- **NOKIA CORPORATION**  
Keilalahdentie 4, FIN-02150 Espoo; FI; FI(Residence); FI(Nationality)
- **NOKIA INC**  
6000 Connection Drive, Irving, TX 75039; US; US(Residence); US(Nationality); (Designated only for: LC)

**Inventor(s):**

- **RAHNASTO Ilkka J**  
Riekkopolku 3B, FIN-01450 Vantaa; FI

**Legal Representative:**

- **STOUT Donald E(et al) (agent)**  
Antonelli, Terry, Stout & Kraus, LLP, Suite 1800, 1300 N. Seventeenth Street, Arlington, VA 22209; US



	Country	Number	Kind	Date
Patent	WO	200184282	A2-A3	20011108
Application	WO	20011B702		20010427
Priorities	US	2000561211		20000428

#### Detailed Description:

the distributor code for a distributor authorized to distribute the content file and a key code that is formed as a combination of the identification code and the distributor code. The terminal device needs to have the key code that matches the identification code and the distributor code in order to properly receive and use the content file. The administrator may distribute several key codes each representing a different content file or a... ..the terminal devices 40 and 60 may be constructed in a similar manner. The data 60 may be a locally-stored medium such as a CD-ROM, a magnetic diskette, a tape, etc. or the data may be accessed through a network such as the Internet or the data 60 may...

## **NPL Search Results**

23/5/2 (Item 2 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
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### **Collaborative coding and decoding techniques for multiple access channel**

Ali, F.; Honary, B.

**Corresp. Author/ Affil:** Ali, F.: Lancaster Univ, Lancaster, United Kingdom

IEE Proceedings: Communications ( IEE Proc Commun ) 1994 141/2 (56-62)

**Publication Date:** 19940101

**Item Identifier (DOI):** [10.1049/ip-com:19941043](https://doi.org/10.1049/ip-com:19941043)

**Document Type:** Article; Journal **Record Type:** Abstract

**Language:** English **Summary Language:** English

**Number of References:** 22

It is highly desirable to use simple and effective multiple access coding and decoding techniques which are capable of multiple access function and error control. The collaborative coding multiple access (CCMA) techniques potentially permit efficient simultaneous transmission by several users sharing a common channel, without subdivision in time, frequency or orthogonal codes. The authors investigate the performance of uniquely decodable CCMA schemes employing hard decision and maximum likelihood decoding techniques. A low complexity maximum likelihood decoding technique is presented. The reliability performance of various coding schemes employing these decoding techniques are carried out in the presence of AWGN conditions. The simulation results are presented in the form of symbol and codeword error rates as a function of signal to noise ratios. It is shown that uniquely decodable CCMA schemes permit the multiple access function to be combined with that of forward error correction.

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23/5/5 (Item 5 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
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### **CROSS PARITY CHECK CONVOLUTION CODES FOR MAGNETIC TAPE.**

Fuja, Tom; Heegard, Chris; Blaum, Mario

**Corresp. Author/ Affil:** Fuja, Tom: Cornell Univ, Ithaca, NY, USA, Cornell Univ, Ithaca, NY, USA

**Conference Title:** 1986 IEEE International Symposium on Information Theory (ISIT).

**Conference Location:** Ann Arbor, MI, USA

**Sponsor:** IEEE, Information Theory Group, New York, NY, USA

**E.I. Conference No.:** 9610

1986 , IEEE 86CH2374-7 (42-43)

**Publication Date:** 19861201

**Publisher:** IEEE

**Document Type:** Conference Paper; Conference Proceeding **Record Type:** Abstract

**Language:** English **Summary Language:** English

Summary form only given. The authors define and analyze cross parity check (CPC) convolutional codes, a class of error-control codes with both interesting theoretical properties and practical implementation advantages. CPC codes evolved from ideas used in an error-control scheme implemented on the IBM 3480 tape subsystem. The authors begin by placing both the 3840 code and its variation in a firm convolutional code context; specifically, they construct parity check matrices and describe systematic generators for these codes. They use the insight gained to define the class of CPC codes and to construct canonical parity check and generator matrices. They then prove that CPC codes are, in fact, maximum distance separable (MDS) convolution codes. The authors demonstrate how CPC encoding/decoding delay can be shortened by 'folding' the parity check lines by dividing each term in the parity check matrix by some fixed polynomial, keeping only the remainder. In particular, they give a class of polynomials that, when used in this way, produce a code that is not only still MDS, but also retains much of its geometrical regularity.

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23/5/8 (Item 1 from file: 2)  
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**A weakness in smart card PKI certification**

**Author(s):** Young, A.

**Book Title:** IEEE Systems, Man and Cybernetics Society Information Assurance Workshop (IEEE Cat. No. 03EX676)

**Inclusive Page Numbers:** 30-4

**Publisher:** IEEE, Piscataway, NJ

**Country of Publication:** USA

**Publication Date:** 2003

**Conference Title:** IEEE Systems, Man and Cybernetics Society Information Assurance Workshop

**Conference Date:** 18-20 June 2003

**Conference Location:** West Point, NY, USA

**Number of Pages:** 307

**Language:** English

**Document Type:** Conference Paper (PA)

Smartcards are becoming an integral part of public key infrastructures since they are separate computing devices that can store and utilize private keys without ever revealing them. Since the private keys are generated, stored, and used onboard to sign/decrypt data, smartcards are ideal when in the hands of a trusted private key owner. But, it is well known that nonreputability is only achieved when the private key owner does not expose his or her own private signing key. This implies that a very strong threat model exists in smartcard security: the user is not trusted to keep his or her own private key secret. It is a point in fact that corporations worldwide are concerned with this very problem and are making efforts to ensure that their employees cannot disclose their own signing private keys. An employee that could do so could later repudiate signatures on purchase orders, sales, and other legally binding transactions. A weakness in smart card PKI certification is shown that allows users to spoof the key generation processes on their smartcards and in effect grant them access to the bits of their private keys. A simple countermeasure is given that thwarts the possibility of this attack. ( 11 refs.)

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23/5/13 (Item 6 from file: 2)  
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**VLSI array synthesis for polynomial GCD computation**

**Author(s):** Jeong, Y.<sup>1</sup>; Burleson, W.<sup>1</sup>

**Affiliation(s):**

<sup>1</sup> Dept. of Electr. & Comput. Eng., Massachusetts Univ., Amherst, MA, USA

**Book Title:** Proceedings. International Conference on Application-Specific Array Processors (Cat. No. 93TH0572-8)

**Inclusive Page Numbers:** 536-47

**Publisher:** IEEE Comput. Soc. Press, Los Alamitos, CA

**Country of Publication:** USA

**Publication Date:** 1993

**Conference Title:** Proceedings of International Conference on Application Specific Array Processors (ASAP'93)

**Conference Date:** 25-27 Oct. 1993

**Conference Location:** Venice, Italy

**Conference Sponsor:** Euromicro

**Editor(s):** Dadda, L. Wah, B.

**Item Identifier (DOI):** [10.1109/ASAP.1993.397173](https://doi.org/10.1109/ASAP.1993.397173)

**Number of Pages:** xii+594

**Language:** English

**Document Type:** Conference Paper (PA)

Polynomial GCD (greatest common divisor) finding is an important problem in algebraic computation, especially in **decoding error correcting codes**. The authors show a new systolic array structure for the polynomial GCD problem using a systematic array synthesis technique. The VLSI implementation of the array structure is area-efficient and achieves maximum throughput with pipelining. The dependency graph (DG) of the Euclid GCD algorithm is drawn using iterated polynomial division. The resulting DG is data-dependent and variable-sized. The authors consider the worst-case implementation to make the DG data-dependent and fixed-size, where data-dependences are hidden inside by introducing four different working modes in each DG node. This novel approach requires just a few additional multiplexers and can be generalized for other data-dependent and variable-sized computation. The authors then map the DG to a one-dimensional systolic array using a linear mapping. The new array structure has  $m_0 + n_0 + 1$  processing elements, where  $m_0$  and  $n_0$  are degrees of two polynomials. It can find a GCD of any two polynomials of total degree less than or equal to  $m_0 + n_0$ . The block pipeline period is one, which means that it can start a new GCD computation immediately in the next cycle. Unlike the array of Brent and Kung, a pre-processing step for extracting a common factor  $X^i$  is not necessary and the size of the processing element (PE) does not depend on  $m_0$  and  $n_0$ . The authors extend this new array structure to the extended polynomial GCD algorithm, which is closely related to the decoding of BCH and Reed-Solomon codes. To verify the structure, they have used the VERILOG simulator, and implemented a 2 mu CMOS test chip. ( 13 refs.)

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23/5/15 (Item 8 from file: 2)

DIALOG(R)File 2: INSPEC

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#### **Improved decoding algorithm on Reed-Solomon codes using division method**

**Author(s):** Je Hong Jeong<sup>1</sup>; Jin Soo Park

**Affiliation(s):**

<sup>1</sup> Dept. of Comput. Sci., Keongyang Univ., South Korea

**Journal:** Journal of the Korean Institute of Telematics and Electronics , vol.30A , no.11 , pp.21-8

**Country of Publication:** South Korea

**Publication Date:** Nov. 1993

**Language:** Korean

**Document Type:** Journal Paper (JP)

Decoding algorithm of noncyclic Reed-Solomon codes consists of four steps which are to compute syndromes, to find error-location polynomial, to decide error-location, and to solve error-values. There is a decoding method by which the computation of both error-location polynomial and error-polynomial can be avoided in conventional decoding methods using Euclid algorithm. The disadvantage of this method is that the same amount of computation is needed that is equivalent to solve the avoided polynomial. This paper considers the division method on polynomial on  $GF(2^m)$  systematically. And proposes a novel method to find error correcting polynomial by simple mathematical expression without the same amount of computation to find the two avoided polynomials. Especially, the authors propose the method by which the amount of computation to find  $F(x)$  from the division  $M(x)$  by  $x$ ,  $(x-1)$ ,  $\dots$ ,  $(x-\alpha^{m-2})$  respectively can be avoided. By applying the simple expression to **decoding procedure on RS codes**, the authors propose a new **decoding algorithm**, and to show the validity of present method, computer simulation is performed. ( 11 refs.)

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23/5/23 (Item 16 from file: 2)

DIALOG(R)File 2: INSPEC

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#### **Probability decoding of majority codes matched with APM signals**

**Author(s):** Ankudinov, D.R.; Portnoy, S.L.

**Journal:** Elektrosvyaz , pp.13-17

**Country of Publication:** USSR

**Translation Journal:** Telecommunications and Radio Engineering, Part 1 (Telecommunications) , vol.44, no.8, pp.1-6

**Publication Date of Translation Journal:** Aug. 1989

**Country of Publication of Translation Journal:** USA

**CODEN of Translation Journal:** TCREAG  
**Language:** English  
**Document Type:** Journal Paper Translation Abstracted (JP)

The problem of increasing the efficiency of utilizing the frequency and power resources of information transmission systems is of great importance. One method for solving this problem is the matching of correcting codes with multiposition signals, achieved through the use of generalized cascade codes (GCC), whose internal codes form a system of embedded signal ensembles while the external codes are correcting codes. The authors discuss the coding and decoding of GCC and use the partial case of information transmission over a channel without memory, with additive white Gaussian noise of zero mean and variance, as an example. The method of 'soft' decoding of majority codes which have been matched with APM (amplitude-phase modulation) signals, and the method for calculating the empirical probabilities described, make it possible to synthesize GCC codes with the described structure. Their use makes it possible to increase the power gain as a result of coding. ( 4 refs.)

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23/5/25 (Item 18 from file: 2)  
DIALOG(R) File 2: INSPEC  
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**Low cost security solutions for personal computers**

**Author(s):** Schultz, J.B.  
**Journal:** Signal , vol.44 , no.3 , pp.71-4  
**Country of Publication:** USA  
**Publication Date:** Nov. 1989  
**Language:** English  
**Document Type:** Journal Paper (JP)

Personal computer security advances in hardware and software systems are emerging in a host of new products in the commercial marketplace with applications to the Department of Defence and other government agencies. Designed for office and limited tactical applications, several of these off-the-shelf hardware and software devices commercially available cost less than \$300. Security features in some of these combination hardware/software or software only systems include the following: (i) automatic encryption/decryption of file directories; (ii) owner identification codes and passwords; (iii) secure transmission over modems; (iv) flexible security hierarchy. ( 5 refs.)

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23/5/30 (Item 23 from file: 2)  
DIALOG(R) File 2: INSPEC  
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**Video recorder programming with VPV**

**Journal:** Funk-Technik , vol.41 , no.6 , pp.249-51  
**Country of Publication:** West Germany  
**Publication Date:** June 1986  
**Language:** German  
**Document Type:** Journal Paper (JP)

A simple procedure for the home programming of a novel video recorder using videotext to accept TV transmissions according to the VPS system, now widely employed by the two German networks (ARD, ZDF), is described in general terms. The recorder is the VPV model (acronym for videotext-programmed video-recorder), from the Thomson (old SABA) plant in Villengen. An additional bonus is the ability to display videotext pages via this recorder on any TV receiver, i.e. not having a videotext decoder. The author presents hexadecimal code words and equivalent screen symbols of the 7 controls and reproduce examples of a stored VPS program and selections from daily programs. ( 0 refs.)

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23/5/32 (Item 25 from file: 2)  
DIALOG(R) File 2: INSPEC

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**An integrated approach to CD players. II. The decoding electronics**

**Author(s):** Nijhof, J.

**Journal:** Electronic Components & Applications , vol.6 , no.4 , pp.216-22

**Country of Publication:** Netherlands

**Publication Date:** 1984

**Language:** English

**Document Type:** Journal Paper (JP)

For pt.I see ibld., vol.6, no.4. p.209-15 (1984). Until now, no compact disc (CD) player has made full use of the error-correcting capability of the CD system's cross-interleaved Reed-Solomon **code** (CIRC). The **author** describes a **decoder** that can make the maximum four erasure corrections of this code. For errors that cannot be corrected by the CIRC, the decoder performs a basic interpolation. For full-performance players, a circuit that has an 8-sample interpolator and a new FIR digital filter with four times over sampling is available. In combination with a low-order analog filter, this digital filter produces no detectable sound coloration of the audio. ( 3 refs.)

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23/5/36 (Item 29 from file: 2)

DIALOG(R) File 2: INSPEC

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**Exponentiation modulo a polynomial for data security**

**Author(s):** Kak, S.C.<sup>1</sup>

**Affiliation(s):**

<sup>1</sup> Dept. of Electrical & Computer Engng., Louisiana State Univ., Baton Rouge, LA, USA

**Journal:** International Journal of Computer & Information Sciences , vol.12 , no.5 , pp.337-46

**Country of Publication:** USA

**Publication Date:** Oct. 1983

**Language:** English

**Document Type:** Journal Paper (JP)

This paper describes some properties of exponential modulo a polynomial and suggests its use for encryption in a mode that can be cryptanalysed in approximately  $O(pd^2)$  time, where  $d$  is the size of the message frame and  $p$  is the prime modulo which the rankwise computations are carried out. While for sufficiently large  $pd$  ( $\sim 10^5$ ) this appears to provide a one-way function which can be used in a public-key cryptosystem, the **author** shows that since encryption/**decryption** effort is defined in  $O(d^2 \log pd \log \log p)$  time, a practical application of the proposed algorithm would be either in a secret key or in a tamper-proof, hardwired secret polynomial system. ( 8 refs.)

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23/5/56 (Item 2 from file: 99)

DIALOG(R) File 99: Wilson Appl. Sci & Tech Abs

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**A modified learning rule of the neural network for error correcting decoding**

**Augmented Title:** discussion of A neural network for error correcting decoding of binary linear codes by Anna Esposito, Salvatore Rampone and Roberto Tagliaferri

Lifang Li ; Zhigang Cao

Neural Networks v. 10 (Mar. '97) p. 387-8

**Document Type:** Feature Article **ISSN:** 0893-6080 **Language:** English **Record Status:** Corrected or revised record

In a discussion of the 1994 article by Esposito et al. describing a neural network for error correcting **decoding** of binary linear **codes**, the **writers** propose a modified learning rule for the neural network described. Using the new training and tuning method, it is proved that the network can be extended for all binary linear codes and complementary codes regardless of their maximum Hamming weights.

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23/5/63 (Item 2 from file: 60)  
DIALOG(R)File 60: ANTE: Abstracts in New Tech & Engineer  
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**Method and apparatus for enhancing software security and distributing software**

Chang, Sheue-Ling; Gosling, James, USA

**Publisher Url:** <http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netatht/ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=5724425.PN.&OS=pn/5724425&RS=PN/5724425>

**Document Type:** Patent      **Record Type:** Abstract

**Language:** English

Source code to be protected, a software application writer's private key, along with an application writer's license provided to the first computer. The application writer's license includes identifying information such as the application writer's name as well as the application writer's public key. A compiler program executed by the first computer compiles the source code into binary code, and computes a message digest for the binary code. The first computer then encrypts the message digest using the application writer's private key, such that the encrypted message digest is defined as a digital 'signature' of the application writer. A software passport is then generated which includes the application writer's digital signature, the application writer's license and the binary code. The software passport is then distributed to a user using any number of software distribution models known in the industry. A user, upon receipt of the software passport, loads the passport into a computer which determines whether the software passport includes the application writer's license and digital signature. In the event that the software passport does not include the application writer's license, or the application writer's digital signature, then the user's computer system discards the software passport and does not execute the binary code. As an additional security step, the user's computer computes a second message digest for the software passport and compares it to the first message digest, such that if the first and second message digests are not equal, the software passport is also rejected by the user's computer and the code is not executed. If the first and second message digests are equal, the user's computer extracts the application writer's public key from the application writer's license for verification. The application writer's digital signature is **decrypted** using the application writer's public key. The user's computer then compares a message digest of the binary code to be executed, with the **decrypted** application writer's digital signature, such that if they are equal, the user's computer executes the binary code.

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23/5/64 (Item 3 from file: 60)  
DIALOG(R)File 60: ANTE: Abstracts in New Tech & Engineer  
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**Authoring system, authoring key generator, authoring device, authoring method, and data supply device, information terminal and information distribution method**

Yamanaka, Yasuhiro; Yoshitomi, Kazunori; Hisamatsu, Fumiaki; Yoshino, Kenji; Ueno, Shinichi, USA

**Publisher Url:** <http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netatht/ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=7328458.PN.&OS=pn/7328458&RS=PN/7328458>

**Document Type:** Patent      **Record Type:** Abstract

**Language:** English

An authoring system authors content data for distribution through an information terminal by encryption for copyright protection. The system includes an authoring device and an authoring key generator. The generator generates a content identifier uniquely allocated to each of the content data, an authoring key enabling key uniquely allocated to the authoring device, and an authoring key obtained by encrypting a content key for encrypting the content data and a second content key using the CID and the CEK. The second content key is formed by encrypting the content key using a root key. The **authoring** device has a unit which **decrypts** the content key and the second content key using the CID and the CEK, and a unit which encrypts the content data using the decrypted content key to generate authored encrypted content data.

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28/5/1 (Item 1 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
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**Approaches to biometric watermarks for owner authentication**

Vielhauer, C.; Steinmetz, R.

**Corresp. Author/ Affil:** Vielhauer, C.; 1-Platanista GmbH, Darmstadt, 64289, Germany

**Editor(s):** Wong, P.W.; Delp, E.J.

**Editor(s) Affil.:** Apalo.com Ltd., Hong Kong, China

**Conference Title:** Security and Watermarking of Multimedia Contents III

**Conference Location:** San Jose, CA United States **Conference Date:** 20010122-20010125

**Sponsor:** IS and T; SPIE

**E.I. Conference No.:** 58754 **Proceedings of SPIE - The International Society for Optical Engineering**  
( Proc SPIE Int Soc Opt Eng ) ( United States ) 2001 4314/- (209-219)

**Publication Date:** 20011113

**Publisher:** SPIE

**Item Identifier (DOI):** [10.1117/12.435401](https://doi.org/10.1117/12.435401)

**Document Type:** Conference Paper; Conference Proceeding **Record Type:** Abstract

**Language:** English **Summary Language:** English

**Number of References:** 15

One major application domain for digital watermarks is **copyright protection**. Besides the design of watermarking algorithms, technologies for copyright holder identification have to be investigated. To ensure authenticity of an individual person, a wide number of biometric procedures exist. We define and describe new biometric watermarks, which denote the application of biometric reference data of individuals within digital watermarks to identify and verify ownership. Amongst the two classes of physiological and senso-motoric biometric schemes, the later appears more appropriate for biometric watermarks, as only these provide implicit expressions of intention. As such, we choose on-line handwriting as an appropriate base technology for our three new scenarios in biometric watermarking. In the first approach, embedding keys are being generated from biometric reference data, which requires stable and robust features and leads to rather complex keys. To overcome the complexity boundaries, the second approach develops a biometric reference hash, allowing key look-ups in key certifying servers. Although this proceeding leads to less complex keys, it still requires stable features. The third approach describes the embedding of biometric reference data within a watermark, allowing owner verification by more variant features, but limitations apply due to capacity of watermarking systems and also protection of the reference data is required. While most handwriting-based verification systems are limited to signature contexts, we discuss two additional context types for user authentication: passphrases and sketches.

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28/5/2 (Item 1 from file: 2)  
DIALOG(R)File 2: INSPEC  
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**An introduction to servo pneumatic positioning: an interactive multimedia program development supporting outcome-driven engineering assessment**

**Author(s):** Ranky, P.G.; Ranky, M.F.; Flaherty, M.; Sands, S.; Stratful, S.

**Journal:** European Journal of Engineering Education , vol.23 , no.3 , pp.339-52

**Publisher:** Carfax

**Country of Publication:** UK

**Publication Date:** Sept. 1998

**Language:** English

**Document Type:** Journal Paper (JP)

Servo pneumatics retain the advantages of standard pneumatics and add the opportunity for closed-loop controlled, programmable positioning to within fractions of a millimeter in systems in which positions can be approached rapidly and without overshoot, stability under variable loads and conditions, and adaptive control for optimized positioning. The authors' challenge was to create an interactive multimedia program that could communicate exciting technical material to interested



parties, including students and academia, professional design, industrial and manufacturing systems engineers, marketing and sales engineers and managers in a nonlinear, enjoyable fashion. Their approach was that of interactive multimedia on CD-ROM, allowing the integration of text, color images, videos and animation for the purpose of following an engineering problem-solving approach, both when modeling, as well as when illustrating real-world solutions with interactive digital videos. Furthermore, this article introduces outcome-driven assessment principles (as defined by the American Accreditation Board of Engineering Education) as the **key to the authors'** educational multimedia design objectives. It illustrates open-loop controlled pneumatic and closed-loop controlled servo pneumatic positioning systems, their components, their programming and some of their applications. ( 21 refs.)

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28/5/3 (Item 2 from file: 2)  
DIALOG(R) File 2: INSPEC  
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**Today's best CD-ROM books**

**Author(s):** Reese, J.<sup>1</sup>

**Affiliation(s):**

<sup>1</sup> Educ. Libr., Vanderbilt Univ., Nashville, TN, USA

**Journal:** CD-ROM Professional , vol.7 , no.1 , pp.119-21

**Country of Publication:** USA

**Publication Date:** Jan. 1994

**Language:** English

**Document Type:** Journal Paper (JP)

The literature of CD-ROM has exploded in the last several years. As CD-ROM technology demonstrates its staying power and continued growth, publishers have turned out more sources for interested users. The **author** provides some **key** books, both directories and other resources, to keep in mind whether you need to purchase CD-ROM products or just learn more about what's going on in the world of CD-ROM. ( 0 refs.)

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28/5/4 (Item 3 from file: 2)  
DIALOG(R) File 2: INSPEC  
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**Performance of modulation codes in various optical recording media**

**Author(s):** van Uijen, C.M.J.<sup>1</sup>; Spruit, J.H.M.<sup>1</sup>

**Affiliation(s):**

<sup>1</sup> Philips Res. Labs., Eindhoven, Netherlands

**Journal:** Japanese Journal of Applied Physics, Part 1 (Regular Papers & Short Notes) , vol.31 , no.2B , pp.670-9

**Country of Publication:** Japan

**Publication Date:** Feb. 1992

**Language:** English

**Document Type:** Journal Paper (JP)

The performance of modulation codes has been measured in ablative and magneto-optic **recording media** as well as in mastered direct discs. The modulation codes studied include NRZ (i.e. the uncoded bit stream), runlength limited sequences, multi-level recording schemes, and differentially detectable codes. The **authors** also studied the performance of codes when the optical channel is equalised, particularly the case of partial response detection of NRZ. The general conclusions are that: (1) differentially detectable codes require the full penalty in data density caused by the loss in code rate, (2) multi-level recording does not offer significant advantages, and step-constrained multi-level codes perform worse than their unconstrained counterparts, (3) runlength limited sequences are useful codes to enhance the density while offering additional practical advantages, and (4) partial response detection of uncoded bit streams transmitted through an equalised optical recording channel achieves the highest density. ( 12 refs.)

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28/5/5 (Item 4 from file: 2)  
DIALOG(R)File 2: INSPEC  
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**A watermarking technique robust to spatial scaling for moving picture application**

**Author(s):** Min-Suk Hong<sup>1</sup>; Tae-Yun Chung<sup>1</sup>; Kang-Seo park; Sang-Hui Park

**Affiliation(s):**

<sup>1</sup> Dept. of Electr. & Comput. Eng., Yonsei Univ., Seoul, South Korea

**Journal:** Journal of Electrical Engineering and Information Science, vol.5, no.3, pp.209-17

**Publisher:** Korean Inst. Electr. Eng.

**Country of Publication:** Taiwan

**Publication Date:** June 2000

**Language:** English

**Document Type:** Journal Paper (JP)

The digital watermarking has been proposed to protect copyright by embedding an invisible signal. We present a private/public key watermarking technique robust to spatial scaling. The private key is used to identify the copyright owner of digital video data, while the public key is used to embed copy control data. The proposed algorithm uses a synchronization code to accomplish the robustness to spatial scaling such as aspect ratio conversion and resampling for a spatial scalability hierarchy. We performed MPEG2 video compression for test sequences to evaluate the degradation of image quality caused by watermark insertion. In order to evaluate the geometrical robustness, we have performed 16:9 or 4:3 aspect ratio conversion for test sequences. We obtained watermarked frames that have no perceptual difference from the original frame and the geometrically robust watermark algorithm. ( 10 refs.)

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28/5/6 (Item 1 from file: 60)  
DIALOG(R)File 60: ANTE: Abstracts in New Tech & Engineer  
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**Authoring system, authoring key generator, authoring device, authoring method, and data supply device, information terminal and information distribution method**

Yamanaka, Yasuhiro; Yoshitomi, Kazunori; Hisamatsu, Fumiaki; Yoshino, Kenji; Ueno, Shinichi, USA

**Publisher Url:** <http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netahtml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=73 28458.PN.&OS=pn/7328458&RS=PN/7328458>

**Document Type:** Patent **Record Type:** Abstract

**Language:** English

An authoring system authors content data for distribution through an information terminal by encryption for **copyright protection**. The system includes an authoring device and an **authoring key generator**. The generator generates a content identifier uniquely allocated to each of the content data, an **authoring key enabling key** uniquely allocated to the authoring device, and an **authoring key** obtained by encrypting a content key for encrypting the content data and a second content key using the CID and the CEK. The second content key is formed by encrypting the content key using a root key. The **authoring device** has a unit which decrypts the content key and the second content key using the CID and the CEK, and a unit which encrypts the content data using the decrypted content key to generate authored encrypted content data.